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REVIEW: Speedy New AirPort Time Capsule





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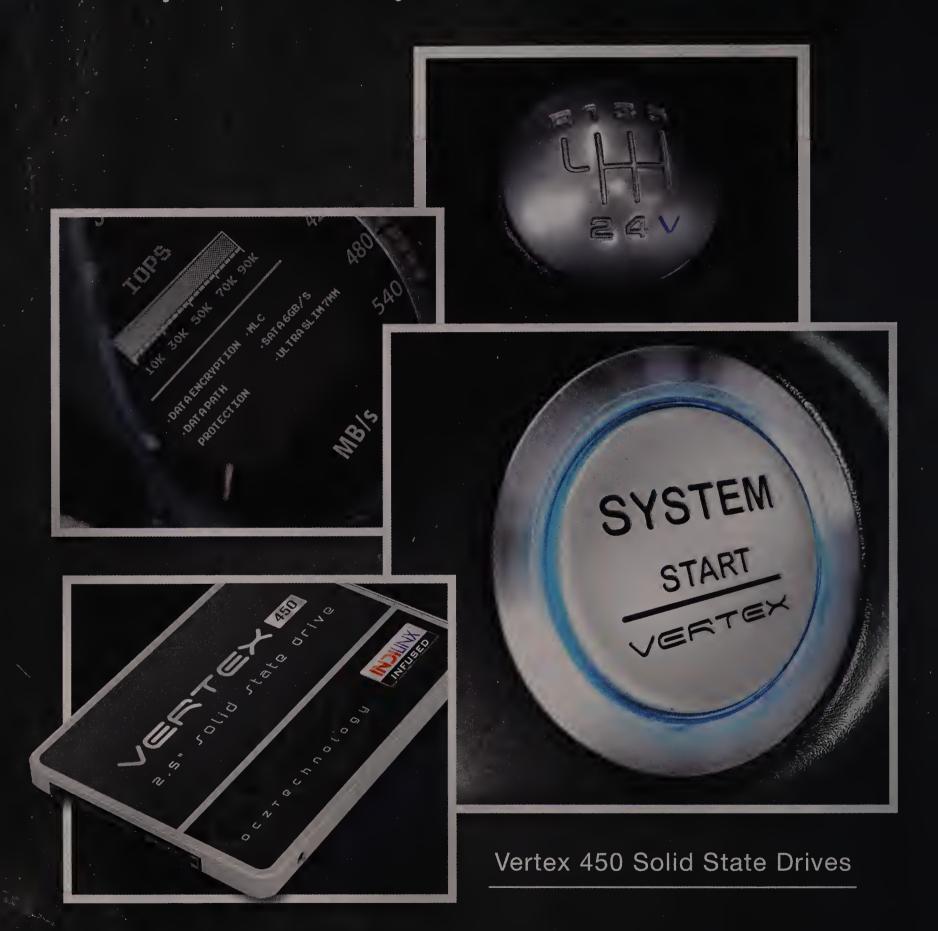
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iWork for iCloud's Missing Ingredient

We don't work in a vacuum, so why should we be limited to emailing our iWork documents?

erhaps the most surprising announcement at Apple's Worldwide Developers Conference in June was also the most underwhelming. Having failed to release any substantial updates to its iWork productivity suite since the iPhone versions in 2011, Apple announced that it would be bringing the office apps to yet another platform: the Web.

No, you're not experiencing déjà vu. Back in 2009, Apple launched a public beta of what it then called iWork.com. Our own editor, Dan Miller, began his first look at that venture (go.macworld.com/ iworkdotcom) by saying, "Let's make one thing clear up front: iWork.com (in its current pre-release form) is not a collaborative online productivity tool like Google Docs or Zoho."

Unsurprisingly, iWork.com fell flat, and last year it died an ignominious death. And yet, with the announcement of iWork for iCloud, Apple seems poised to make the same misstep all over again.

Unconnected in the Connected Age

iWork for iCloud is an impressive technological achievement—everyone I spoke to at WWDC more or less agreed that wringing such performance out of browser-based apps is pretty slick, assuming they work as demonstrated.

But none of that matters a whit if the apps don't address users' needs. The main selling point of iWork for iCloud seems to be that it will bring the ability to read iWork documents to Windows-Apple even gave rare stage time to a demo on a Windows computer at its keynote. "No more reason to give in to your colleagues' demands that you use Office at work," the company seemed to be suggesting.

It's great that Windows users can collaborate more easily on documents created in iWork, but what's missing is



If you haven't built some form of collaboration into your productivity apps, you're shooting yourself in the foot.

any mention of real-time, simultaneous collaboration. It didn't come up. At all.

And when you think about it, that's a bit shocking considering that the company was demoing an office-productivity suite that lives on the Web. In the early 2000s, when you had nifty apps like SubEthaEdit, collaboration was still a novelty. But in an age when we all email, tweet, update our status, and share our lunch plans over the Internet, how can you ignore the fact that, yes, we sometimes even work together?

These days, if you haven't built some form of collaboration into your productivity apps, you're shooting yourself in the foot. Take Google Apps: It isn't the best-looking suite, but its collaboration features are second to none in ease of use and reliability. It has picked up a lot of traction among folks who don't want to deal with Apple's paltry sharing options or to wrestle with Microsoft's 800-pound gorilla.

Speaking of the folks in Redmond. Apple's demo of iWork for iCloud on a Windows machine seemed like a shot across Microsoft's bow. But that's kind of like the old bit about the aircraft carrier versus the lighthouse. In late June, Microsoft showed off the collaboration features coming to Office on Windows, Android, iOS, and the Web, which make Apple's announcements ring a bit hollow, despite the lackluster nature of Office for iPhone.

Still iWorking

To Apple's credit, iWork honcho Roger Rosen did say before his demo of iWork for iCloud that the company would have "awesome" updates for iWork for Mac and iOS this fall, so collaboration features might yet be forthcoming. And given that it has been more than four years since iWork received a substantial upgrade (the current version is still iWork '09), a rebuild from the ground up to accommodate collaboration could be one explanation for why we've had to wait so long.

iWork.com failed because it was tone deaf. People weren't awed by a service that let them post read-only documents to a website, because it was so far behind what competitors were offering. Although the weight of Apple's ecosystem is usually a powerful selling point, Google especially has a big lead on the Weband more to the point, an affinity for it.

This isn't the first time I've dinged Apple for a lack of collaboration features, and though I hope it might be the last, those who ignore history...yada, yada, yada. Apple has always had trouble sharing nicely, but the improvements to Shared Photo Streams and the addition of AirDrop for iOS indicate that the company may have realized that its users don't reside in a vacuum. If it can bring that realization to the productivity realm, well, maybe we finally can all work together.



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Feedback

What's Ahead for iWork?

Fall brings pumpkins, icy air, and family members with tech questions galore. This month, our readers tell us what their best tech tips are for relatives and friends. They also muse over the future of iWork and iCloud (see page 5 for our take), and talk about Logic Pro X.

THE FUTURE OF IWORK AND ICLOUD

If I'm working on a project with others, I'm able to share my calendar and my tasks. For that, iCloud works great, but to work on a document with someone else (even if they're using Pages), I have to save it out of iCloud, then put it in SugarSync. The other person then gets it, works on it in Pages, and saves it back into SugarSync. I then have to get it out of SugarSync, open it back up in Pages, then save it back to iCloud. It's close to making me want to pay for a Microsoft Office 365 account.

VirTechGo, via Macworld.com

Maybe Apple views collaboration as a pro-level feature. It seems that Apple is slow about or maybe even averse to adding higher-level features to iWork. Is this part of the deal cut with Microsoft to bring Office to the Mac? Why no master layout or cross referencing in Pages? Why does Pages for iOS not have a layout mode (and many other features)? Why no layers or timeline for Keynote?

neutrino23, via Macworld.com

CORRECTION

On page 72 of the September issue, the mouse rating for the MEElectronics A161P in-ear headphones should have been \$\$\$\$\frac{1}{2}\$.

All reader communications to Mocworld—through mail, email, our social networking accounts, and our online forums—are presumed to be intended for publication. We reserve the right to edit them.

LOGIC PRO X— A SMART UPGRADE?

Logic Pro X is really great. Looks like most of the functionality is preserved. The UI is better distributed. The library has been refreshed too, some new great loops. Still downloading the sound content though.

jendakub, via Macworld.com

Logic X looks great. Shame about the hefty price tag for a Logic 9 user. But my main gripe is, I've owned my Lion Mac for less than a year, and Logic Pro X's requirements make this OS redundant.

Jedy, via Macworld.com

GOOD ADVICE

Readers respond with their best tips for new Mac- and iPhoneusing friends and relations.

- @lorenzlenaerts: Just use it. You can't do anything wrong with it.
- @NurseMagooey: Performing a hard reset on your iPhone will fix almost any glitch!
- @dandailey: Use a separate Apple ID per person, then additional shared ID(s) for purchases and other things you want shared.
- @kerri9494: Get on iChat/ Messages. So I can take over your machine and fix what you just broke.
- @Dan_Anderton: Enable iCloud and Time Machine. Sync and back up all your data.







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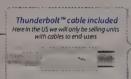
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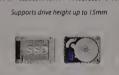
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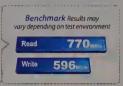
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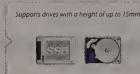
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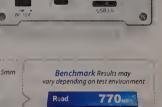
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MacUser

News and Analysis About Macs, OS X, and Apple

Refreshed AirPort Time Capsule Is a Good Buy

BY MICHAEL BROWN



Apple is ahead of the curve when it comes to adopting the IEEE 802.11ac wireless networking standard. While 802.11ac routers are not new, Apple's latest AirPort Time Capsule is the first to

include an integrated hard drive. Apple is also one of the first manufacturers to include an 802.11ac client adapter as standard equipment in its computer lineup.

Performance

When I used AccessAgility's WiFiPerf benchmarking tool on the 802.11ac Time Capsule, with a 2013 MacBook Air as the client, I measured a very respectable TCP (Transmission Control Protocol) throughput rate of 451.9 megabits per second at close range (router and client in the same room, about 9 feet apart). That's more than twice as fast as the older 802.11n Time Capsule's 218.7 mbps (operating a 5GHz network). And the 802.11ac Time Capsule delivered TCP throughput of over 100 mbps in two other rooms where the older Time Capsule couldn't maintain any connection to the MacBook Air.

Unfortunately, something is crimping Apple's 802.11ac network performance: Its gear is radically slower when transferring



the MacBook Air, to 134.0 mbps (averaging 10 minutes, 13 seconds). Copying that same file back to the MacBook Air: 163.5 mbps (about 8.5 minutes). Obviously, none of those figures are anywhere close to WiFiPerf's result of more than 450 mbps.

The current theory is that OS X is not properly scaling TCP window size during file transfers to allow the MacBook Air's 802.11ac client adapter to achieve peak performance. Apple hasn't confirmed that this is the problem, but the company is aware of the performance discrepancy and is reportedly working on a solution.

Backward Compatibility

Aside from operating a 5GHz network based on the 802.11ac standard, the Time Capsule can also operate a 2.4GHz network to support older 802.11b, -g,

Apple's latest AirPort Time Capsule is a strong 802.11ac router that provides 2TB of shared storage for media and client backups.

real-world files over the network (WiFiPerf is a synthetic benchmark for measuring TCP throughput).

When I copied a 10GB collection of files and folders—from the hard drive in an iMac that was hardwired to the Time Capsule, to the SSD in a wirelessly networked MacBook Air (again, about 9 feet from the router)—I measured throughput of just 84.8 mbps, meaning that the transfer took more than 16 minutes (I performed each test three times, averaging the results). Reading those files from the MacBook Air and writing them to the iMac was a little faster: 132.1 mbps (or nearly 10.5 minutes).

The Time Capsule's network performance improved only slightly when copying a single 10GB file from the iMac to and -n clients, as well as a 5GHz network to support 802.11a and 802.11n clients. This is important, as the new MacBook Air is one of the few devices to support the 802.11ac standard.

Using WiFiPerf once again, I measured TCP throughput with a mid-2011 13-inch MacBook Pro connected first to the older 802.11n Time Capsule (at 5GHz) and then to the new 802.11ac Time Capsule. TCP throughput was only a little higher at close range—301.7 mbps with the new Time Capsule versus 285.3 mbps with the 802.11n model—but the new router was much faster at a longer distance: 67.7 mbps compared to just 32.3 mbps with the client separated from the router by 65 feet and three insulated interior walls.

Feature Set

The 802.11ac Time Capsule has six antennas: three to transmit/receive on its 2.4GHz radio, and three to transmit/receive on its 5GHz radio. The antennas are mounted near the top of the 6.6-inch-tall columnar device, which likely helps it achieve longer range. It supports three 433.3-mbps spatial streams for a maximum physical link rate of 1.3 gbps. (The 802.11ac adapter in the new MacBook Air supports two spatial streams for a maximum physical link rate of 867 mbps when connecting to an 802.11ac router.)

The new Time Capsule also supports an optional feature of the 802.11ac standard known as beam forming. With this technology, the router and each of its clients exchange information as to their physical locations. The devices then use this information to concentrate their radio energy so that they can achieve the highest possible throughput.

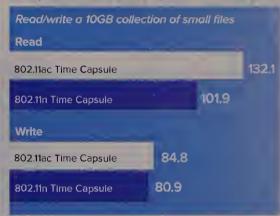
The Time Capsule is currently avail-

able with either a 2TB or a 3TB drive. Both models have an accelerometer that will park the drive's read/write heads if the router is dropped or tipped over. Unlike some other hard-drive-equipped routers, the Time Capsule uses a SATA interface to the hard drive, versus a USB-to-SATA bridge. Apple, however, declined to disclose the rotational speed of the drive's platters and whether the drive has a SATA 6Gb/s interface or a slower SATA 3Gb/s interface.

On the back of the Time Capsule is a gigabit WAN port (for connecting to the Internet) and three gigabit LAN ports (for attaching hardwired clients). It also has one USB 2.0 port, for a shared printer or more storage. The power supply is built into the enclosure, which is much better than having an outlethogging wall wart, but an in-line power brick would have been a better alternative. Between the 802.11ac chipset, the hard drive, and the power supply, the Time Capsule needs to shed a lot of

Apple 802.11ac Time Capsule vs. Apple 802.11n Time Capsule

Wireless file-transfer performance comparison, in mbps (5GHz band)



heat, so Apple put a fan inside to keep things cool, and you can definitely hear it spinning in a quiet room.

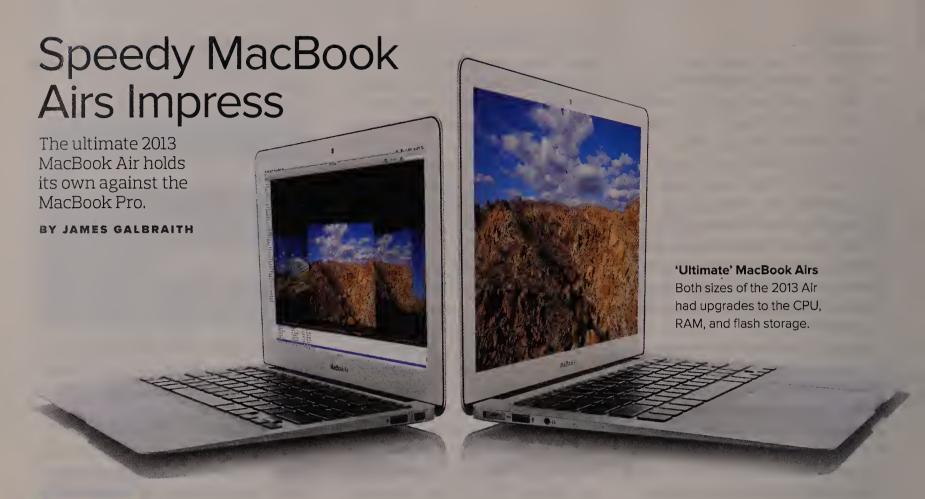
Bottom Line

My WiFiPerf benchmarks indicate that this router is at least as fast as the best non-Apple 802.11ac routers I've tested, and the file-transfer shortcomings will most likely be fixed in a future OS X update.

Macs: Current Lineup

PRODUCT	SPECS	RATING	PRICE	DISPLAY	SPEEDMARK 8 1	MORE INFO
DESKTOP						
iMac	Intel Core i5/2.7GHz (quad-core)	***	\$1299	21.5 inches	194	go.macworld.com/imac212712
	Intel Core i5/2.9GHz (quad-core)	***	\$1499	21.5 inches	20,4	go.macworld.com/imac212912
	Intel Core i5/2.9GHz (quad-core)	****	\$1799	27 inches	238	go.macworld.com/imac272912
	Intel Core i5/3.2GHz (quad-core)	\$\$\$\frac{7}{2}	\$1999	27 inches	224	go.macworld.com/imac273212
Mac Mini	Intel Core i5/2.5GHz (dual-core)	***	\$599	Not included	131	go.macworld.com/mini2512
	Intel Core i7/2.3GHz (quad-core)	***	\$799	Not included	164	go.macworld.com/mini2312
Mac Pro	Intel Xeon/3.2GHz (quad-core)	*** ¹ / ₂	\$2499	Not included	200	go.macworld.com/macpro3212
	Intel Xeon/2.4GHz (12-core)	\$\$\$\frac{1}{2}\$	\$3799	Not included	215	go.macworld.com/macpro2412
PORTABLE						
MacBook Air	Intel Core i5/1.3GHz, 128GB	****	\$999	11 inches	165	gö,macworld,com/air1281113
	Intel Core i5/1.3GHz, 256GB	***** ²	\$1199	11 inches	165	go.macworld.com/air2561113
	Intel Core i5/1.3GHz,128GB	******	\$1099	13 Inches	166	go.macworld.com/air1281313
	Intel Core i5/1.3GHz, 256GB	** **********************************	\$1299	13 inches	166	go.macworld.com/air2561313
MacBook Pro	Intel Core i5/2.5GHz (dual-core)	\$\$\$\frac{1}{2}	\$1199	13 inches	121	go.macworld.com/macbook132512
	Intel Core i7/2.9GHz (dual-core)	****	\$1499	13 inches	153	go.macworld.com/macbook132912
	Intel Core i7/2.3GHz (quad-core)	***	\$1799	15 inches	161	go.macworld.com/macbook152312
	Intel Core i5/2.5GHz (dual-core) 128GB	\$\$\$\$\frac{1}{2}	\$1499	13-Inch Retina	184	go.macworld.com/macbookret13128
	Intel Core i5/2.6GHz (dual-core) 256GB	**** ¹	\$1699	13-inch Retina	190	go.macworld.com/macbookret132613
	Intel Core i7/2.4GHz (quad-core)	**** ¹ / ₂	\$2199	15-inch Retina	270	go.macworld.com/macbookret152413
	Intel Core i7/2.7GHz (quad-core)	****	\$2799	15-inch Retina	284	go.macworld.com/macbookret152713

Speedmark 8 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.8 (Mountain Lion). For more information, see go.re-cworld.com/speedmark8.



As is customary with just about all Macs,
Apple offers a small number of standard-configuration systems that you can buy off the shelf (these are the systems *Macworld* uses for review), along with a handful of optional upgrades that—for a price—allow purchasers to customize their new Macs.

The 2013 MacBook Air is no exception:
For both the 11-inch and 13-inch models,
Apple offers more RAM, higher-capacity
flash storage, and faster processors.
Macworld Lab put together an "ultimate"
configuration of the 13-inch version of this
new MacBook Air, and the performance
gains were so significant that our configureto-order (CTO) MacBook Air competed
well against Apple's current \$1699 13-inch
Retina MacBook Pro. We then tried a CTO
11-inch model, and got great results again.

The standard-configuration 2013
MacBook Air has 4GB of 1600MHz
LPDDR3 RAM, a dual-core 1.3GHz Intel
Core i5 (Haswell) processor that can
reach speeds of 2.6GHz with Turbo

Boost, and flash storage of either 128GB capacity (\$999 for an 11-inch model, \$1099 for a 13-inch) or 256GB (\$1199 for an 11-inch Air, \$1299 for a 13-inch Air).

Your configuration decisions on the MacBook Air are especially important due to the closed design of the laptop. The RAM and CPU are not user-upgradable, and it's unclear whether third parties will offer internal storage upgrades. (This MacBook Air has a new implementation of flash storage, so flash-storage modules designed for the 2012 Air will not work.)

Configure to Order

Doubling the RAM on the \$1299 13-inch MacBook Air from 4GB to 8GB adds \$100 to the base price, while increasing the capacity of the flash storage from 256GB to 512GB adds \$300. Swapping out the standard 1.3GHz Core i5 processor (with 3MB of L3 cache) for a faster 1.7GHz Core i7 processor capable of reaching 3.3GHz with Turbo Boost (4MB of L3 cache) adds \$150. Our ultimate CTO model puts all three options into a new 13-inch MacBook Air for a total of \$1849.

Using our system performance testing suite, Speedmark 8, we found the 13-inch CTO MacBook Air to be 23 percent faster overall than the \$1099 stock 13-inch.

128GB flash-storage model. The CTO Air was faster in every test, with 24 percent quicker times in our HandBrake, Aperture, and file-decompression tests.

Though both laptops used the same integrated Intel HD Graphics 5000, the CTO Air had 8 percent higher frame rates in Portal 2, and 14 percent faster performance in Cinebench's OpenGL test.

The 2013 CTO MacBook Air was 9 percent faster overall than last year's ultimate CTO MacBook Air, which had a 2GHz dual-core Core i7 Ivy Bridge processor, 500GB of flash storage, and 8GB of memory. Many tests were very close, with 8 of the 15 individual test results showing a difference in performance of less than 5 percent. (iMovie export was considerably faster on the older 2GHz model.) The new CTO Air's Intel HD Graphics 5000 was 24 percent faster than the older CTO Air's HD Graphics 4000 in Cinebench's OpenGL test, and 18 percent quicker in our Portal 2 tests. The new laptop's faster flash storage helped it copy our 6GB of files and folders 31 percent faster than last year's ultimate CTO MacBook Air did.

The new CTO MacBook Air was 8 percent faster overall than the \$1699 13-inch, 2.6GHz Core i5 (Ivy Bridge)

Retina MacBook Pro. Eight performance tests showed less than a 5 percent difference between the 13-inch Retina MacBook Pro and the new CTO Air. The Retina MacBook Pro held its own in two tests: It was 27 percent faster in the iMovie export, and 13 percent faster in HandBrake. The CTO Air, with its Intel HD Graphics 5000, was 49 percent faster in the OpenGL tests and 23 percent faster in Portal 2 than the Ivy Bridge—powered Retina MacBook Pro and its HD Graphics 4000. The CTO Air was also 39 percent faster in the files and folder copy test.

the two units in our overall system performance benchmark suite, Speedmark 8. On most tests they finished within a second or two of each other.

The CTO 11-inch MacBook Air was 24 percent faster overall than the stock 11-inch 2013 model we tested. Photoshop tests finished 17 percent faster with the CTO Air. iPhoto and Aperture were 25 percent faster, and the PCMark productivity suite was 31 percent faster running under VMWare Fusion than on the stock 11-inch, 256GB MacBook Air.

We also compared the CTO 11-inch

While the MacBook Air improvements are mostly subtle, they succeed in making these versions of an already excellent product even more desirable.

CTO 11-Inch MacBook Air Is an Impressive Performer

Our 11-inch CTO model takes the standard \$1199 system with a 1.3GHz dual-core Core i5 processor, 256GB of flash storage, and 4GB of RAM, and boosts the laptop with a faster 1.7GHz dual-core Core i7 processor (an additional \$150), 8GB of RAM (\$100), and 512GB of fast flash storage (\$300), for a total price of \$1749. The processor, RAM, and flash capacity of this CTO model are the same as in our ultimate CTO 13-inch MacBook Air. That 13-inch version costs \$100 more due to its larger display and higher battery capacity.

The two CTO configurations performed very similarly: Just one point separated

lvy Bridge processor. We found that the new Haswell-based MacBook Air was 36 percent faster overall thanks to its integrated Intel HD 5000 graphics and faster flash storage.

For the same reasons, the CTO 11-inch

MacBook Air against last year's stock

version with its 1.7GHz dual-core Core i5

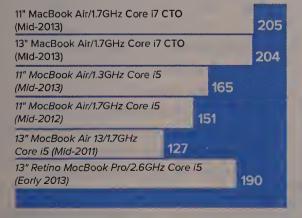
For the same reasons, the CTO 11-inch MacBook Air was also 8 percent faster overall than the 2013 13-inch Retina MacBook Pro. The Retina MacBook Pro was faster in some tests, including the HandBrake, Cinebench CPU, and iMovie import and export tests.

In our battery tests of the standard 11-inch and 13-inch MacBook Air and the CTO MacBook Air machines, the 11-inch systems (with lower battery capacity) didn't last as long on a single charge as the 13-inch models did. While the new 13-inch MacBook Airs lasted over 8 hours in our movie playback test, the 11-inch models lasted just over 6 hours. The CTO systems' battery results in the video playback tests were very similar to those of the stock versions.

We saw a bigger difference in battery life using the Peacekeeper benchmark (a browser test that is very demanding), where the CTO 11-inch MacBook Air lasted just 3 hours, 28 minutes, versus a time of 4 hours, 5 minutes for the stock version of the 11-inch MacBook Air.

Macworld Lab Test

Benchmarks: Speedmark 8



Higher results/longer bars are better. Macworld Lab testing by James Galbraith, Albert Filice, and Jeff Sandstoe.

Lack of Focus Killed File-Maker's Bento

ento, FileMaker's consumeroriented database app, is soon to be no more: The developer wants to focus on its flagship FileMaker line.

Bento's simplicity and ease of use belied its functionality and capabilities, but it never took off the way FileMaker had hoped.

Databases are the workhorses of the software industry; even something as simple as opening a webpage requires the use of half a dozen databases before one data packet leaves our computers.

Consequently, the software industry has invested heavily in database development over the years. Today, you can find a database library for pretty much any kind of problem a developer could encounter.

Bento's customizability worked against it, because its intended audience often lacked the sophistication and patience required to use it.

Bento was ill-fitted for the business world, as well: I've seen whole companies operating with employees of relatively modest technical ability using little more than a few Microsoft Word and Excel files.

At the same time, Bento's feature set was too limited for businesses. It was, in many ways, a sophisticated shoe-box app. You could use it to catalog your collections, keep track of the things you lent to your friends, and a lot more. Bento was easy to work with, yet relatively powerful.

Ultimately, however, Bento had a lack of focus that made it unappealing. Having to create your own database is a bit like having to build a car from scratch: probably a good idea if you're a Formula 1 driver, but not so much if you just want to drive it to the store and back.—MARCO TABINI

What Developers
Think of Dropbox
as an iCloud
Alternative

BY LEX FRIEDMAN

evelopers would love to love iCloud. But many of them find Apple's syncing platform ineffective, unreliable, or worse. Some developers have even pointed to iCloud syncing woes as a significant holdup in releasing new versions of their apps.

And now Dropbox, the beloved powerhouse of sync, has taken a direct shot across Apple's cloudy bow, with its new Datastore API. Dropbox says this API makes simple work of syncing structured data across devices, and even platforms: Unlike iCloud, the Dropbox Datastore API works across iOS, Android, and the Web.

Because of the way Dropbox works, it offers one other potential advantage over iCloud: Developers who are working with Datastore can peek directly at the syncing data on Dropbox's servers as they test and build their apps, a level of visibility that iCloud hasn't offered to date.

tages over other sync options right now."

Pierce adds, though, that while "Datastore seems simple to implement," what it offers doesn't match directly what iCloud's Core Data sync does—or is meant to do. That iCloud feature, when it works, should let apps reliably sync changes to large, complex databases, without requiring that the full data set be uploaded to the server. Datastore's "scope is more limited," Pierce says. But if it works consistently, "that may still make it an attractive option" for many.

Charles Perry of Leaf Hut Software thinks Datastore shows promise, too: "Syncing is a notoriously hard problem... Even Apple, with all its resources, Dropbox account and will only need to authenticate with it," says Pierce. But that's less assured—and less seamless than an iCloud-backed option.

What Dropbox Does and Doesn't Do

"In theory at least, iCloud used with Core Data offers...powerful tools to work with relational data, an extensive query language, [and] tools for working in multithreaded environments," Pierce says. Datastore can't match that functionality. It can't perform sorted queries, do queries that require joining bits of data from multiple datasets, or paginate results—all functions that (at least currently) are beyond the scope of what Dropbox offers.

Such features, Pierce explains, are a must-have for "larger datasets that cannot all be held in memory." But he adds, "I think the Dropbox Datastore can really shine for apps with small datasets."

If Apple has cause for concern, Perry says, it's all that cross-platform support that Dropbox offers. "iCloud," he explains, "represents [Apple's] attempt to lock users into their ecosystem... If Dropbox catches on as a mainstream sync solution, it makes it easier for users to pack up and take their data to other mobile platforms like Android, or even other desktop platforms like Windows."

iCloud syncing, Pierce says, has so far "not delivered on its promises."

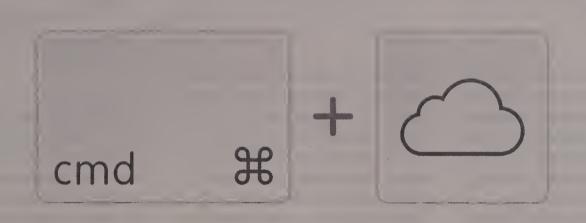
Dropbox's Datastore can't match iCloud in some ways. But if Apple has cause for concern, it's in the cross-platform support that Dropbox offers.

Macworld spoke with several developers to get their thoughts on Datastore as compared to iCloud. Expectations are mixed.

Seeing Potential

Greg Pierce of Agile Tortoise is pleased by Dropbox's announcement: "I think it's exciting to see more players in this space." He says that "if it reliably delivers what it promises, then it's a potentially very useful API with some real advancouldn't pull it off. But Dropbox has a proven record in document syncing, so they may be able to succeed where others have failed."

Several developers we talked to also mentioned that iCloud doesn't require users to sign up for a new account, and Dropbox does. That said, "Dropbox has become ubiquitous enough that it is highly likely that someone who downloads your app will already have a

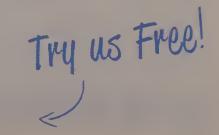


It's cloud storage made simple.

- ✓ 100% Automated
- ✓ Access Files Anywhere
- ✓ Share Files with Friends
- ✓ Sync Multiple Computers
- ✓ 256 Bit Secure Encryption
- ✓ Free iPhone, iPad & Android app



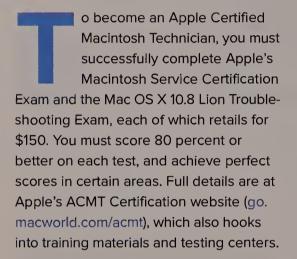




How to Become an Apple-Certified Macintosh Technician

It's a rough, somewhat expensive process, but you gain a lot.

BY CHRIS BARYLICK



Becoming Apple-certified lets you repair Macs under AppleCare warranty. You'll be able to order parts for your clients' machines via Apple's Global Service Exchange (GSX)—including obscure, hard-to-find parts—at Apple's prices, with no retail markup.

Certification and GSX access also let you participate in live chats with Apple's technicians. This chat-room format gives you a main line to the mothership, and is handy if a diagnosis is eluding you. Perhaps the most important benefit is that certification allows better access to tech jobs with Apple Authorized Service Partners and Apple resellers, as well as institutions that do their own support. It also helps current techies draw a better salary: You know your stuff, and a piece of paper from Apple says so. It helps you attract customers should you decide to go solo as a repair tech.





Protect your on-line privacy and bypass any geo-restrictions to unblock website and services

and bypass any geo-restrictions to unblock website and services like Facebook, Youtube, Skype, Voip in countries that censor content.

Vpn One Click





- Translated in 28 languages
- New Proxy function
- Fast, Secure, Trusted

Vpn One Click uses advanced encryption technology to secure your browser, mail, chat and any other application that uses internet.

Vpn One Click protects your Ip Address enabling your to surf the web anonymously and you can watch your local television from abroad connecting to a server available in 19 different countries.



Keep in mind certain provisos. Though becoming an Apple Certified Macintosh Technician should permit you to perform warrantied repairs, you may run into gray areas unless you're employed by an SSA (Self-Servicing Account) that Apple allows for universities and institutions to service its products, or an AASP (Apple Authorized Service Provider), which is more akin to the tech-shop structure that you may be accustomed to.

If you can pull it off, you'll gain entry to Apple's mighty GSX database, complete with updated technical manuals that you can access from any location as you work on-site with clients. (Send inquiries to usfieldservice@apple.com if you want to talk to Apple about this feature.)

In June of this year, the rules regarding testing to become an Apple Certified Macintosh Technician changed significantly. The exam—traditionally hosted at

Most exam questions focus on diagnosing potential issues, and Peachpit Press sells a good set of study guides (go.macworld.com/studyguides). The core book sells for about \$45 in print and \$36 in ebook format. The guides include review sections and quizzes.

Once the exam begins, you have 90 minutes to complete the multiple-choice questions. (You can return to questions you might have struggled with initially.) The scoring is, of course, immediate; you can find details about Apple's exam scoring at go.macworld.com/testfag.

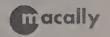
If you don't pass an exam the first time, you can immediately retake it if you're willing to pay the exam fee again.

Going through Apple Certified Macintosh Technician training and exams is a rough, somewhat expensive process, but it also opens new doors. If you love diving into Apple's hardware—and if doing so comprises a significant part of your living—the certification is indispensable.

ACMT certification helps techies draw a better salary; you know your stuff, and you now have a piece of paper from Apple that says so.

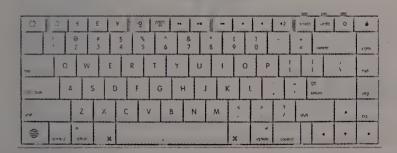
In addition, access to Apple's GSX requires not only ACMT status but also employment at either an Apple-approved SSA or an AASP. The company does, on occasion, allow for remote or field access to the GSX, but Apple has to vet you.

proctored sites around the country and online—switched to an online-only format; see the company's ACMT FAQ page (go. macworld.com/acmtfaq). The current certification exam schedule is at go. macworld.com/acmtsched.



Full Size Wired Keyboard for iPad with Lightning Connector

Macally's New iKeyLT is perfect for students because it features sturdy scissor-key-switches for a sensitive and responsive touch, many ISO device specific shortcut keys and includes and iPad stand.











FULL SIZE KEY CAPS



Made for BiPhone DiPad

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Hot Stuff

What We're Raving About This Month

R6100

Netgear's \$100 802.11ac wireless router is equipped with two transmitters and receivers, so it's capable of delivering a maximum 802.11ac link rate of 867 megabits per second. Because the R6100 is a dualband model, it can run a simultaneous 802.11n network with a maximum link rate of 300 mbps on the 2.4GHz frequency band. The new router is outfitted with one USB 2.0 port, to enable either printer or storage sharing, and it has a four-port 10/100 ethernet switch (netgear.com).—MICHAEL BROWN



FMBDR6x

FastMac's FMBDR6x is a slot-loading USB Blu-ray Disc burner that sits underneath the new Mac Pro. The drive has an aluminum enclosure and a nonskid base to keep it in place. The FMBDR6x supports disc burning for Blu-ray, DVDs, and CDs. Available for preorders now, it's expected to ship around the time you read this (\$159 preorder, \$179 regular price; fastmac.com).—ROMAN LOYOLA



iTwin Connect

The \$199 iTwin Connect lets you create your very own VPN networks using a two-piece accessory. Just pull the two pieces of the iTwin Connect apart and plug the larger dongle into a USB port on any computer on your home or office network; plug the other end into your Internet-connected laptop. The iTwin Connect immediately creates a secure VPN connection between the two computers (itwin.com).

—JOEL MATHIS



PrintLife 1.0

If you're looking for a way to make cards, labels, letterheads, and the like, the \$50 PrintLife promises to make the process fast and easy. The company says it steers clear of "cheesy clipart graphics and corny templates" in favor of "beautiful included artwork and templates." The app provides nearly 8GB of artwork from iScrapbook.com—a total of over 5100 high-resolution graphics—along with more than 280 project templates, more than 125 business-card templates, and more than 300 label templates. The app supports all major card stock, paper, and envelope sizes (chronosnėt.com).—DAN FRAKES



Shoot the next Hollywood blockbuster with the world's most amazing digital cinema camera!

The world's most mind blowing feature films, television commercials and music videos look amazing because they are filmed with digital film cameras! The new award winning Blackmagic Cinema Camera is unlike a regular video camera or DSLR camera because it's a true high end digital film camera! You get a true Hollywood cinematic look with 13 stops of dynamic range, interchangeable lenses, high quality RAW and ProRes® file recording plus much more!



Dramatically Better than DSLR Video

The Blackmagic Cinema Camera includes a large 2.5K sensor for super sharp images that eliminate resolution loss HD bayer sensors suffer from, while creating

manageable files that are not too big! The large screen LCD allows easy focusing and the high speed SSD recorder lets you record in ProRes®, DNxHD® and RAW file formats for Final Cut Pro X and DaVinci Resolve!



Super Wide Dynamic Range

The Blackmagic Cinema Camera captures an incredible 13 stops of dynamic range so you can simultaneously capture the brightest highlights and the darkest

shadows all at the same time into the recorded file! This means you capture more of the scene than a regular video camera can so you get more freedom for color correction for a feature film look! You also get a full copy of DaVinci Resolve!



Film Industry Quality

Every feature of the Blackmagic Cinema Camera has been designed for quality. With 2 separate models, you can choose from the world's most amazing EF or MFT

lenses from crafters such as Canon™, Zeiss™ and more. For extreme high end work, you can shoot full 12 bit CinemaDNG RAW uncompressed files for incredible creative range in DaVinci Resolve color correction, as well as the world's best chroma keying!



Accessories Built In

High end cinema cameras often require thousands of dollars of extra accessories to make them work, however the Blackmagic Cinema Camera includes

accessories you need built in! You get a large 5 inch monitor, super fast SSD RAW recorder and professional audio recorder all built in! You also get UltraScope software, used via the built in Thunderbolt™ connection, for on set waveform monitoring!



Blackmagic Cinema Camera

\$1,995

Includes DaVinci Resolve Software



iOS Central

The Latest on the iPhone, iPod Touch, iPad, and App Store



The App Store Turns Five: A Look Back and Forward

Half a decade on, we review the history of this massively successful crowning achievement of the iOS platform.

BY LEX FRIEDMAN

ive years ago, the App Store was born. A million apps, billions of dollars, and vast flocks of Angry Birds later, the store is a huge success. These days, customers download more than 800 apps every second.

. At the iPhone's launch in 2007, Steve Jobs told developers that they could write "apps" for the device by creating Web apps. Developers mostly scoffed. But in March 2008, Apple laid out its roadmap for iOS development—including a software development kit for programmers

to use in writing their own apps—and said that it would provide a storefront where developers could sell their software.

The App Store launched on July 10, 2008, with 552 apps on its virtual shelves—135 of them free. The most common app prices were \$1 and \$10.

Not-So-Humble Beginnings

Among the 552 apps available at launch were MLB.com At Bat, Facebook, Yelp, Shazam, and Super Monkey Ball. The App Store launched in 62 countries, accessible then (as now) from a dedicated iOS app or as a feature crammed into iTunes.

Over the App Store's first weekend, users downloaded more than 10 million apps. Less than a month later, Sega's Super Monkey Ball (\$10; go.macworld. com/supermonkey) hit 300,000 downloads, netting Sega \$3 million and Apple more than \$1 million, in accordance with the store's 70/30 revenue split.

By September, the store had surpassed 100 million downloads. At the close of 2008, the year's most downloaded app was Facebook (free; go.macworld.com/facebook) at 5 million downloads.

2 Billion Downloads

In January 2009, Apple announced the App Store's 500 millionth app download. At that point the store offered 15,000 apps. It then hit 1 billion downloads (in April) and 2 billion (in September), with more than 85,000 apps from 12,500 developers.

Several major apps launched in 2009, including Doodle Jump (\$1; go.macworld.com/doodlejump), which has earned more than \$10 million to date; Real Racing (\$5; go.macworld.com/realracing), one of the most popular game franchises on iOS; and ESPN's ScoreCenter (free; go.macworld.com/espnscore), eventually the App Store's most downloaded sports app.

In 2009, as in 2008, Facebook ended the year as the most downloaded app, this time alongside a free game called Paper Toss (go.macworld.com/papertoss).

At the iPhone's launch in 2007, Steve Jobs told developers that they could write 'apps' for the device by creating Web apps. Developers mostly scoffed.

The iPad Arrives

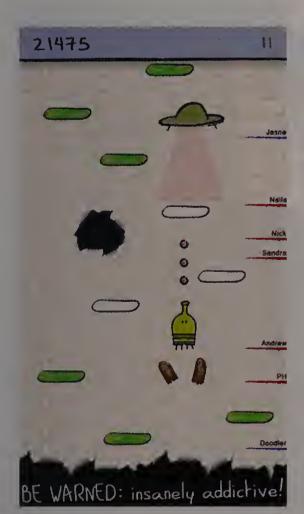
As 2010 dawned, the App Store's downloads total passed 3 billion. Angry Birds (\$1; go.macworld.com/angrybirds) soared in 2010: Apple featured it in the App Store, and Angry Birds sales increased by a factor of more than 50.

In April 2010, the iPad debuted, ushering in a slew of novel software categories.

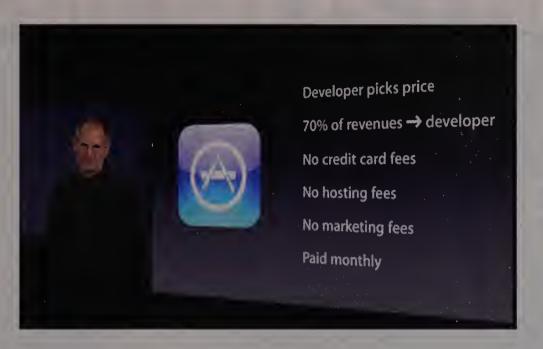
The free Netflix app (go.macworld.com/netflix) arrived in the App Store when the tablet did, offering instant video on-thego. Multiple magazine options, including Time, were newly on offer as well.

By June 2010, the App Store eclipsed 5 billion downloads; more than 225,000 apps—11,000 of them specifically optimized for the iPad—filled the store.

In that same month, Apple announced that it had paid out more than \$1 billion to developers since the App Store's launch.



Doodle Jump This game has made \$10 million.



By this point, the store was available in more than 90 countries. Cut the Rope (\$1; go.macworld.com/cuttherope) followed Angry Birds as one of the most frequently downloaded games of 2010.

The year also saw the iPhone-only launch of Instagram (free; go.macworld. com/instagram). Two years later, Facebook bought it for \$1 billion.

Ninjas, Water, 10 Billion, and Beyond In January 2011, the App Store recorded its 10 billionth app download, a game called Paper Glider (free; go.macworld. com/paperglider).

Subscriptions arrived in the App Store early in the year, with the launch of News Corp's The Daily (go.macworld.com/thedaily), an app that carried a recurring charge. The Daily floundered, but subscriptions caught on in a big way. Today most major periodical publishers offer subscription-based access to their magazines and newspapers in the App Store.

March 2011 saw the launch of the iPad 2 as the App Store zoomed past 65,000 iPad-specific apps, and the App Store's reach swelled to 123 countries.

In October the iPhone 4S and Siri,
Apple's virtual assistant, arrived. At that
point, the App Store held more than half a
million apps, downloads had left the 18
billion mark behind, and customers were
downloading a billion apps every month.

Also, Temple Run (free; go.macworld. com/templerun) exploded. With more than 100 million downloads, it's one of the highest-grossing App Store apps ever.

First Glimpse Steve Jobs announces the App Store.

Angry Birds remained extremely popular for the second straight year, joined by Fruit Ninja (\$1; go.macworld. com/fruitninja).

Billions Served

By January 2012, Apple had paid out more than \$4 billion to developers; and by March, App Store downloads had

surpassed 25 billion. Lucky number 25 billion was a copy of Disney's hugely popular game, Where's My Water? (\$1; go.macworld.com/mywater).

In 2012, the App Store expanded its reach to a grand total of more than 153 countries. The year saw the launch of Paper for the iPad (free; go.macworld. com/paper), a drawing app that went on to be named Apple's App of the Year. Temple Run continued its, er, run as one of the most popular games, joined on the medal platform by Draw Something (\$2; go.macworld.com/drawsome).

It was also the year of the iPad with Retina display (in two versions), the iPad mini, and the iPhone 5, meaning that developers had to plan for more screen permutations than ever before.

In May 2013, just 14 months after hitting 25 billion app downloads, the App Store's total exceeded 50 billion. This time, the milestone app was Say the Same Thing (free; go.macworld.com/saythesame), an app designed in part by members of the band OK Go. In June, Apple said that it had paid more than \$10 billion to developers, an increase of \$6 billion in a scant 15 months, which works out to about \$400 million per month over that period.

Apple will continue to trumpet impressive App Store numbers in the years ahead: 100 billion downloads, \$25 billion paid to developers, and on and on. But the real window into the App Store's success is the ever-increasing amount of time you spend—and the joy you feel—using your iOS devices.

Hands-On: IFTTT for iOS Automates Your Online Life

The new IFTTT app lets you easily set up workflows on your iPhone, promising new automation prowess for iOS users.

BY DAN MOREN

espite all the advances and conveniences that iOS offers, OS X continues to trump it in automation. But with the arrival of IFTTT for iPhone (free; go.macworld. com/ifttt), the gap may be getting smaller.

IFTTT stands for If This Then That. The basic idea: If a predetermined condition is met, then an action is taken. On the Web, IFTTT integrates with various popular services (which it dubs *channels*), including (among others) Evernote, Google Talk, Pocket, RSS, and Twitter.

Though IFTTT's app is more limited than its Web service, it does offer access to new channels by integrating with three services available on your iPhone: your contacts, your reminders, and your device's

Get started with this simple Recipe:

Email me my new iPhone photos by alexander

Welcome to IFFE Mebile

12.17 pm Photos added to a specific album get uploaded to Flickr

Personal Recipe Created!

12.17 pm Channel activated

You activated the Flickr Channel!

Automation Cookbook IFTTT's home screen is a running stream of recipes you've created and other actions you've taken.

photos. Though integration with your phone's data is somewhat limited, the other services that IFTTT offers on the iPhone are extensive—I counted dozens.

Fine-Tuning Channels

Each channel is assigned different options, depending on whether it's the trigger or the action. You can create workflows (recipes in IFTTT parlance) and share them with others. Generally, you have to activate channels, either by entering your credentials for that service or—with phone-specific data—by allowing access to that particular information.

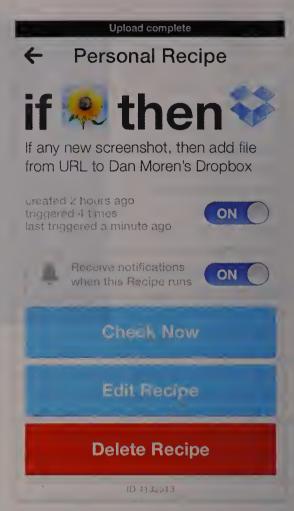
When you first launch IFTTT, it briefly explains the service, and then drops you off at the main screen. That screen's centerpiece is a timeline chronicling recipes you've created, channels you've activated, workflows you've triggered, and so on.

To create a new recipe, you tap the mortar-and-pestle recipe icon at the top right. The screen will then slide over and provide a sidebar where you can choose to create new recipes, activate or deactivate recipes you've already created, or browse available shared recipes by tapping the glasses icon at the top right.

Assembling a Recipe

IFTTT walks you through the process of creating a new recipe, step by step. You can check each recipe to make sure that it works, and you can have it trigger a push notification when the recipe is completed. Many recipes have advanced options that let you tweak the details.

Your recipes sync with IFTTT's website, and you can also access shared recipes from IFTTT's preferences—although I couldn't figure out how to share recipes via the app. (Doing so via the website, in contrast, was a snap.)



Tune In Each channel comes with an array of possible triggers and/or actions.

As a test, I created a few recipes, including one that automatically uploads screenshots from my phone to a Dropbox folder—a handy workflow for me, since I frequently write about iOS apps. The recipe worked, but iOS's restrictions on background apps in iOS 6 and earlier introduce a major limitation to using IFTTT on the iPhone: By default, your recipes trigger only when IFTTT is in the foreground, which means that you lose out on some of the app's "automated" aspects.

IFTTT does enable you to take advantage of a frequently used loophole in iOS's multitasking, however, piggybacking on location services to trigger your recipes whenever your location changes. Adopting that tactic can, however, eat up extra battery life, which is why it's an option in the app's preferences. (You can also choose whether to let the app do its business over cellular data.) Keep in mind, though, that iOS 7's arrival this fall will offer considerably more latitude to apps running in the background, which could unlock more potential for IFTTT.

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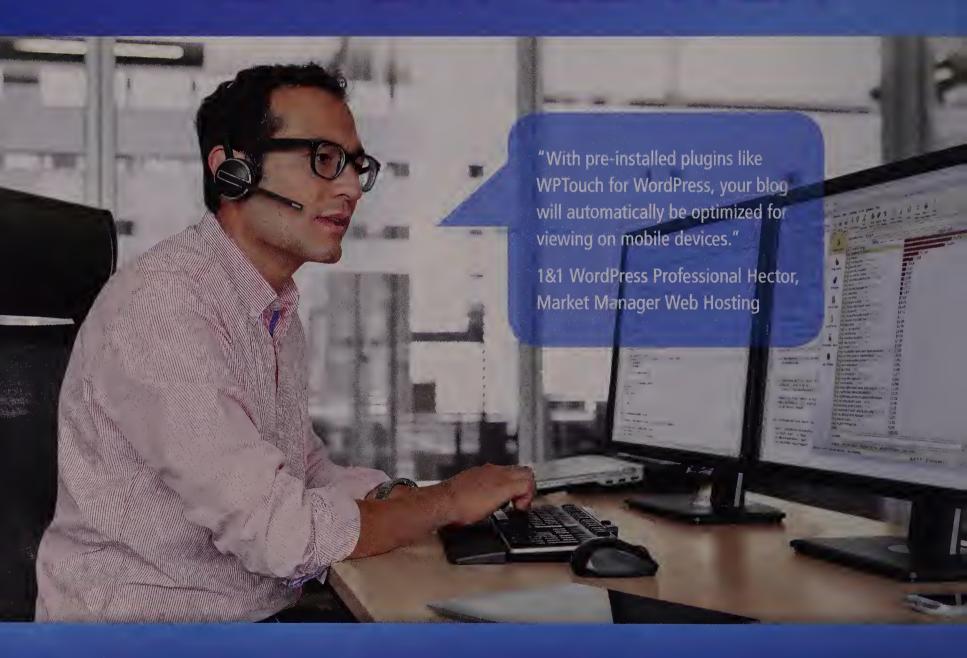
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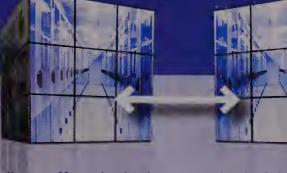
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1&1 Technology Specialist Stefan,
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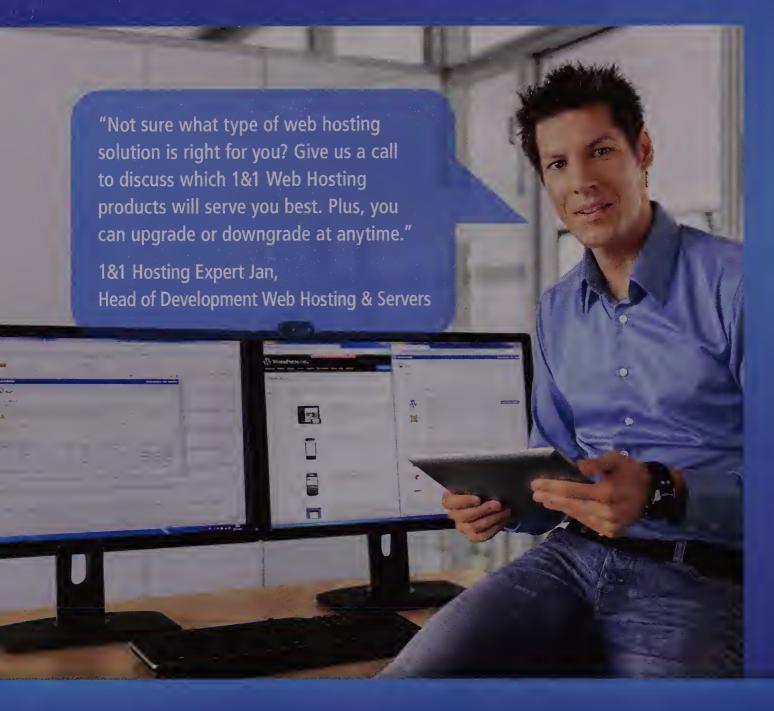
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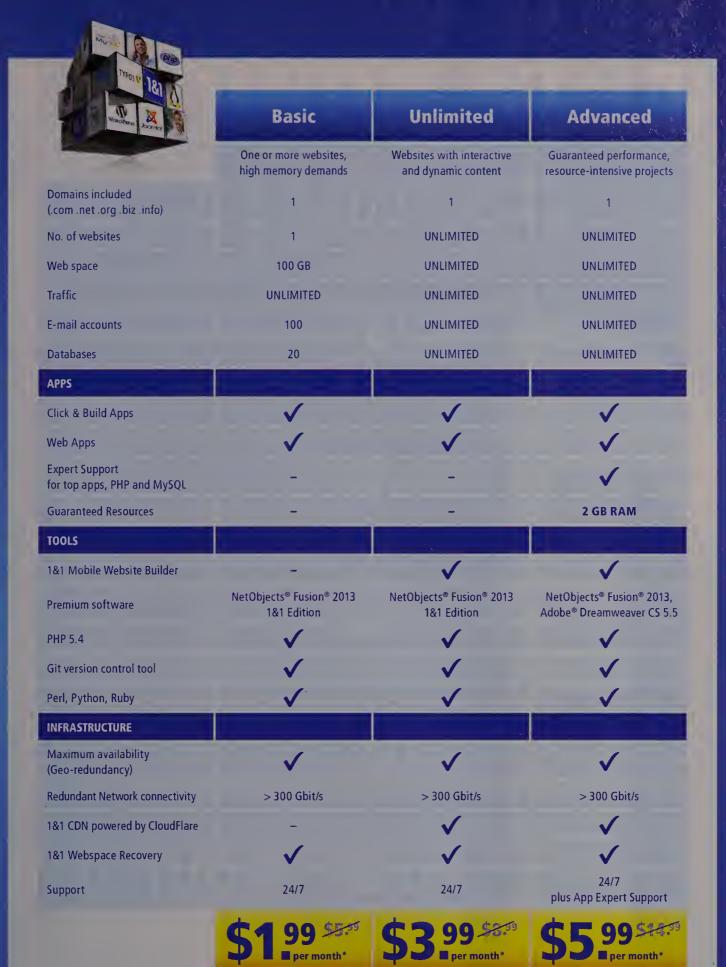
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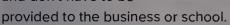
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Apple Details New iOS 7 Features for Business, Education

n its website, Apple has detailed new features of its iOS 7 update for education and business users alike.

App Store license management allows businesses and education institutions to

provide apps to users via Apple's App Store Volume Purchase Program, while letting the organization maintain control over app licenses. Personal Apple IDs can be enrolled in the program, and don't have to be



Schools and businesses also gain mobile device management (MDM) options, letting them wirelessly set up apps, install custom fonts, configure accessibility options and AirPrint printers, and whitelist AirPlay destinations. In education envi-

ronments, instructors can set up iOS devices to be locked to a certain app.

Adding new devices via MDM is simpler with iOS 7. At schools, new devices can be wirelessly enrolled during setup; and business-owned devices can be auto-

matically enrolled at activation, reducing or replacing entirely any manual configuration by an IT department.

A single sign-on feature for education institutions and businesses allows you to use a single set of credentials

across apps: Sign in once, and you can use all the apps requiring that login without being asked to reenter your password.

OS X Mavericks Server's Caching Server 2 will support iOS 7. Content and apps can be cached on a server running on the local network.—DAN MOREN



What's New at the App Store



WunderMap

The free WunderMap app for iPad (go.macworld.com/

wundermap) has always stood out from the crowd of weather-oriented apps. Version 2.0 introduces an overhauled user interface and includes even more weather stations and webcams so you can keep a digital eye on the weather, no matter where you are.—JOEL MATHIS



Contra: EvolutionHD

Hark back to your middle school days of playing

Nintendo with Contra: EvolutionHD (go.macworld.com/contra), a \$3 iPad offering. It revives the old-school action classic with a few new features, including new levels, an in-game weapons shop, more lives, and more bonuses available.—JOEL MATHIS



McLaren's Workshop

The free McLaren's Workshop app for iPad (go.

macworld.com/mclaren) is simply too impressive to dismiss with McKenzie Brothers jokes. The app celebrates the work of Canadian animator Norman McLaren, featuring 51 of his short films, along with a biographical essay. The app also invites creativity, showing how McLaren worked and giving users the opportunity to make their own animations using his techniques. It's cooler than the Great White North.—JOEL MATHIS



Allowance & Chores Bot

The \$2 Allowance & Chores

Bot (go.macworld.com/

allowance) allows you and your children to track your weekly payments to them, as well as their progress toward earning their allowance. The app is protected by a parental password to ensure that Bobby can't increase his own allowance.—JOEL MATHIS

Apple Rolls Out Back-to-School Promotion, Adds iPhone to the Mix

n July, Apple launched its latest back-to-school promotion. When customers purchase a Mac for college, they'll receive a \$100 App Store Gift Card, alongside the usual education pricing discounts (of up to \$200) that the company offers.

Customers can also pick up a \$50 gift card when they buy an iPad; and for the first time, iPhones are included in the promotion. Like its tablet sibling, the smartphone will come with a \$50 gift card that customers can spend in the App Store. The downside of buying an iOS device: Customers won't see the same discounts that they do on Mac purchases. Apple doesn't reduce the price of iPhones or iPads for students and educators.

To qualify for the bonus, Mac or iPad buyers must purchase their device from



the Apple Online Store for Education, an Apple Retail Store, or an Apple Authorized Campus Store; iPhone buyers must purchase their device from one of the first two sources. In addition, qualifying buyers are limited to college students, students accepted to college, parents purchasing for a college student, and faculty or staff members at an education institution.

The gift card is also good for any items purchased from the iBookstore, iTunes Store, and Mac App Store.—DAN MOREN

App Guide

Software for Your iPhone, iPod Touch, and iPad

Roaming Fortress for iOS

offers an interesting twist on tower-defense games. Instead of defending a static tower or central point while enemies move through your map, Roaming Fortress asks you to defend a moving tower.

Your fortress is strapped to the back of a Burdenbeast—a gigantic, lumbering pack animal. In each level, the Burdenbeast moves slowly through the map as you pitch spears, arrows, and other weapons toward waves of enemies blocking your path.

The premise of Roaming Fortress is simple: Get your Burdenbeast and fortress to the end of the level without dying. Along the way, you can pick up

loot, destroy structures, and kill enemies. You can earn three medals for each level: a kill medal, a loot goal medal, and a time medal. Medals unlock weapons, infantry, and better-fortified fortresses in the Outpost, Roaming Fortress's in-game store.

Roaming Fortress has excellent graphics and a nice soundtrack, and it's plenty challenging. If you're not so big on tower defense, you may find the game a little frustrating past the first few levels—but it's still worth a look. The first map—which has 12 levels—is free; each additional map costs \$2; or you can unlock all future maps, of which there will be at least five, for \$5.—sarah Jacobsson purewal





iPhone/IPad | ***; Free; Brisk Mobile

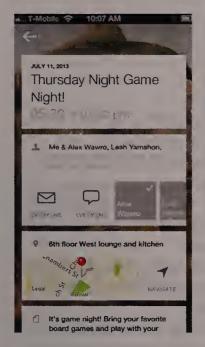


Office Mobile for iPhone

Office Mobile app offers access to three major Office programs: Word, Excel, and PowerPoint. While its Word and Excel apps let you create and edit their

related documents, PowerPoint exists mostly as a way to make minor text changes to presentations—though in a pinch, you can use it as a presentation tool. Using the app requires access to Microsoft's Dropbox-like SkyDrive service that is part of Office 365.

Unfortunately, most Microsoft Office users won't benefit from this app. Its Office 365 requirement, poor user interface, and odd editing tools make Office for iPhone something you should use only if you have to.—JEFFERY BATTERSBY IPhone | \$\psi\$; Free (with \$10 monthly or \$100 annual subscription to Office 365); Microsoft



Cal for iPhone

Cal is a free calendar app that imports your various calendars along with your contacts and location. After completing its painless setup process, you drop into Cal's main view, which lists the events slated for a particular day. Tapping an event reveals details such as its location and other attendees.

Cal takes a simple, straightforward approach to organizing your life. You can't view your entire week, but you can swipe between days or take a look at a monthly overview by swiping down from the top half of the screen.

If you're tired of Apple's pathetic calendar app,

give Cal a try. It's available now in the App Store and it's well worth the few megabytes you'll spend to download it.—ARMANDO RODRIGUEZ

iPhone [] ***; Free; Any.do

Timer 2.0.1

timers for an iPhone 5 or fifth-generation iPod touch—and 12 timers for older devices—that you can set for various activities.

For each timer, you can choose a specific length of time or opt to be prompted for the duration on the fly. Tap any preconfigured timer to start it; tap any ad-hoc timer to be prompted for the time (setting the time automatically starts the timer).



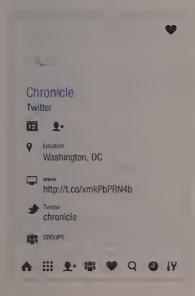


Tumblewords for iOS

falls somewhere between Scramble/
Boggle and Scrabble—and it may be
the most attractive word game I've
ever seen for iOS. There are currently five different themes to choose
from, each of which features beautiful, hand-drawn illustrations. But
beyond the lovely design is a game
that hasn't reached its potential yet.

Your goal is to get the highest score by finding words on the game board in 15 turns, at which point the game is over. The game is pretty relaxed, with no time limit, no leveling, no achievements, and no goals beyond getting a high score. But regrettably it also doesn't have much oomph.—SARAH JACOBSSON PUREWAL

iPhone/iPad | 🕴 🗓; \$3; Minicore Studios



Thread Contact for iOS

that costs just \$1 in the App Store—Thread Contact compiles contact information from your iPhone's Contacts app, Twitter, and Facebook, and puts it all in one place. Both Thread and Buzz offer nice-looking dialers to make phone calls. But unlike Buzz, Thread Contact calls only from your iPhone, not from Skype or several other voice-to-voice applications available for the iPhone.

Thread Contact lets you create personalized groups of contacts, as does Buzz. But adding contacts to a group isn't intuitive: You must go to your contacts individually and edit their information to include them in a group. You can add a contact to a calendar event from within the app, and you can easily share information about an individual contact via email or text. The app is native to the iPad as well as to the iPhone.

Reviews

Accessories and Add-ons for Your iOS Devices



Zaggkeys Cover

*******; \$100; Zagg; zagg.com

Available in black or silver, the Zaggkeys Cover for iPad mini consists of a keyboard (which also serves as a cover) and a hinge for holding your iPad in landscape orientation.

The keyboard's keys are almost full-size (with a few exceptions), and I found that I could type well on them. The case lets you see the keyboard's current battery life, and the keyboard's keys are backlit, as on a Mac laptop.

The Cover rotates to about 35 degrees from horizontal; and in my testing, it held my iPad mini firmly at the angle I positioned it.—LEX FRIEDMAN



Code Folio for iPad

***; \$80; Hex; shophex.com

With its stylish exterior and handy inside pockets, Hex's Code Folio case for third- and fourth-generation iPads is a good option for business folks who travel with their iPad or take it with them to meetings.

The case comes in red, pink, gold, tan, or black, and sports a leather body and an excessively tight elastic strap to keep the cover shut when you're not using your iPad.

The case's inside cover has three card slots for business or credit cards; two pockets to store notepads, paper, or documents; and an elastic penholder to store a stylus. A sturdy, 0.5-inch thick plastic frame does a great job of holding the iPad in place.

The Hex Code Folio looks good, but I wish it worked with the iPad's magnetic Sleep/ Wake feature.—SARAH MITROFF



Powerstation Pro

* \$ 1/2; \$100; Mophie; mophie.com

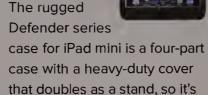
The Juice Pack Powerstation
Pro comes clad in a shockabsorbing, thick-rubber
bumper that covers the sides,
corners, and bottom, and
protects the battery's USB
ports from shock and water.
The top face of the battery
shows four status LEDs along
with the Mophie logo.

The case measures 4.5 by 2.7 by 1.0 inches, and weighs just 7.1 ounces. It has a battery capacity of 6000mAh, but can charge only one device at a time. The Pro took 5 hours, 45 minutes to reach a full charge; it recharged our drained

fourth-generation iPad to 42 percent of full before running out of power itself. On the upside: It has built-in overcharge protection.—JAMÈS GALBRAITH

Defender for iPad Mini

***; \$39; Otterbox; olterbox.com



also fairly usable. Getting it on and off can be tricky, but Otterbox provides a simple-tofollow instruction video.

Parts include a slim, twopiece plastic shell with soft strips to cradle the back of your mini; a thin plastic screen protector; a well-designed, flexible silicone layer that fits snugly around the plastic shell; and a thick, hard plastic cover that doubles as a stand.

The Defender series will admirably protect your iPad mini.—SARAH JACOBSSON PUREWAL

iOS Devices: Current Lineup

PRODUCT	SPECS	RATING	PRICE 1	DISPLAY	MORE INFO
iPad ²	16GB	Wi-Fi, ‡‡‡ ¹ ⁄ ₂	Wi-Fi: \$499; Wi-Fi and cellular: \$629	9.7-inch color (Retina)	go.macworld. com/ipad4
	32GB.	Wi-Fi, ‡ ‡‡‡½	Wi-Fi: \$599; Wi-Fi and cellular: \$729	9.7-inch color (Retina)	go.macworld. com/ipad4
	64GB	Wi-Fi, ‡‡‡ ¹ ⁄ ₂	Wi-Fi: \$699; Wi-Fi and cellular: \$829	9.7-inch color (Retina)	go.macworld. com/ipad4
	128GB	n/a	Wi-Fi; \$799; Wi-Fi and cellular: \$929	9.7-inch color (Retina)	go.macworld. com/ipad4
	16GB (iPad 2)	*****	Wi-Fi: \$399; Wi-Fi and cellular: \$529	9.7-inch color	go.macworld. com/ipad2
iPad Mini	16GB	Wi-Fi, ♦♦♦	Wi-Fi; \$329; Wi-Fi and cellular: \$459	7.9-inch color	go.macworld. com/ipadmini
	32GB	Wi-Fi,	Wi-Fi: \$429; Wi-Fi and cellular: \$559	7.9-inch color	go.macworld. com/ipadmini
	64GB	Wi-Fi,	Wi-Fi: \$529; Wi-Fi and cellular, \$659	7.9-inch color	go.macworld. com/ipadmini
iPhone 4, 4S, and 5	8GB 4 ³	****	Free	3.5-inch color (Retina)	go.macworld. com/iphone4
	16GB 4S⁴	****	\$99	3.5-inch color (Retina)	go.macworld. com/iphone4S
	16GB 5⁴	*****	\$199	4-inch color (Retina)	go.macworld. com/iphone5
	32GB 54	****	\$299	4-inch color (Retina)	go.macworld. com/iphone5
	64GB 5⁴	*****	\$399	4-inch color (Retina)	go.macworld. com/lphone5
iPod Touch 5th Generation	16GB	****	\$229	4-inch color (Retina)	go.macworld. com/touch516
	32GB	*** *********************************	\$299	4-inch color (Retina)	go.macworld. com/touch5
	64GB	***** ¹ / ₂	\$399	4-inch color (Retina)	go.macworld. com/touch5

n/a = Not available. 'All prices are Apple's prices. ²Separate WI-FI-and-cellular iPad models are available for AT&T's network and for Verizon's. ³This phone is available only with an AT&T plan. ⁴These models are available with an AT&T, Sprint, or Verizon plan.

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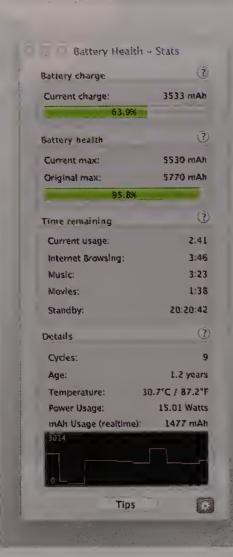
JOHN UELAND

don't cost a lot of money. If there's something you need to do, there's probably a Mac app designed for the task—the trick is finding the one app that's right for you. To help you locate the apps worth using, we researched, downloaded, and tested over 100 apps, and the ones that stood out from the crowd are featured here. New Mac apps are always coming, so be sure to check out our regular monthly *Mac Gems* section in each issue, our Mac Gems blog (macworld.com/macgems) online, and our Mac Gems Twitter feed (twitter.com/macgems).



MAC UTILITIES





BATTERY HEALTH 2.5

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Anyone who has a portable Mac needs to know a handful of tricks to help squeeze a few more computing minutes out of their MacBook battery. Some actions decrease the screen's brightness, while others turn off Wi-Fi-but how do we know if these measures are truly saving battery power? In this case, information literally does equal power, and Battery Health (****), provides the data you need to maximize your Mac laptop's battery power. This menu bar item shows your battery's current charge both as a percentage of a full charge and in terms of the number of milliampere hours (mAh) remaining. The app also shows how much of the battery's original capacity remains. One of the app's coolest features is its real-time power-usage chart, which gives you instant feedback on how an action such as closing applications, turning off Wi-Fi, or tweaking the display brightness affects the amount of power your laptop consumes. - JAMES GALBRAITH



#-CLICK AVENGER 1.0.3

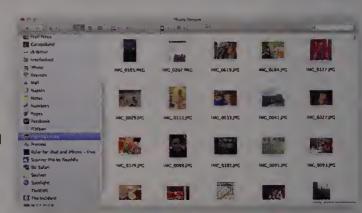
FREE | MANY TRICKS MANYTRICKS.COM

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CLOUD MATE 1.5.6

● \$7 | RED WHEN EXCITED | RWE-UK.COM

Cloud Mate (****) offers features that Apple's iCloud should but doesn't. On the left of the app's two-pane interface sit all of your apps that use your iCloud account for syncing. Click an app, and the right pane lists all the documents and data synced in iCloud for that app. Best of all, Cloud Mate gives you access to Photo Stream without requiring you to launch iPhoto. A companion iOS app lets you access your iCloud-synced files from your iOS device.—LEX FRIEDMAN





DESKTOP GROUPS 1.4.1

\$10 | KITESTACK SOFTWARE | KITESTACK.COM

Does your desktop look like a war zone, with icons and documents scattered all over the place? Then Desktop Groups (****) could be your savior, offering a great way to keep your files organized. The app allows you to divide the contents of your desktop into arbitrary containers—appropriately called "groups." Each group can be home to as many files as you need; and as with a Finder window, you can resize each group however you like. If a group's contents exceed the visible area, you can scroll up or down with your trackpad or mouse until you find what you're looking for. A few additional features—such as the ability to list the contents of a directory alongside its icon, support for customized background colors, and integration with Quick Look—make Desktop Groups invaluable for getting a handle on your desktop clutter.—MARCO TABINI

FLAVOURS 1.0.10

\$16 INTERACTO LABS | FLAVOURS.INTERACTO.NET

Flavours (****) is no ordinary icon enhancer. It's a full-on theme replacer that opens to a gallery and online repository where you can both download themes and publish your own themes. This app does not modify your icons; rather, it layers themes onto menus, controls, windows, desktops, and buttons. You can survey available themes in groups such as Top Rated, Most Popular, and Latest, and then sample interface



changes in the main window. Choosing from available themes is only half the fun. You can also create your own themes—using existing themes as templates or starting from scratch.—JACKIE DOVE



DROPZONE 2.7

\$10 | APTONIC
 APTONIC.COM

Dropzone ($\$\$\$\$\frac{1}{2}$) is one of those apps that you don't know you need until you use it. It lives in your menu bar and expands into a palette of available actions—whether it be compressing a file and emailing it, or uploading a picture to your Flickr account. To perform an action, either drag a file to the action you want in the menu-bar icon's palette or select a file and click the desired action in the Dropzone palette. You can choose from a wide array of built-in actions, or add your own from an extensive list of user-built actions on Aptonic's site. Dropzone is quick and intuitive, and the variety of actions it offers will be a boon to nearly any workflow. To make Dropzone even easier to use, the Circles feature lets you keep a few frequently used actions accessible from the desktop. Dropzone is simple and elegant, and I can't work Without it.-RAY AGUILERA



iCLOUDRIVE 1.18

O DONATION REQUESTED | ZIBITY | ZIBITY.COM

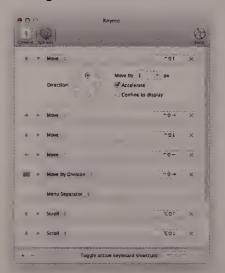
For all iCloud's integration with OS X, Apple's cloud service isn't terribly good at arbitrary file storage. iClouDrive (*****) offers a simple solution to that problem. Run the app and it creates a folder in, by default, your home folder. Any file you drop in that folder is automatically synced to any other Mac on which you've also enabled iClouDrive. The files are stored locally, so you don't need a network connection to open them. iClouDrive is bare-bones as apps go; the only real customization option it offers is the

ability to specify a different location for the iClouDrive folder (you hold down the <Option> key while clicking *Enable iClouDrive* in the installer). But the app works exactly as described, automatically shuttling documents between Macs that have the app installed.—DAN MOREN

KEYMO 1.2

\$5 | MANY TRICKS
 MANYTRICKS.COM

Despite having graced our desks for decades, the mouse is often less efficient than the keyboard for interacting with your computer. Enter Keymo (********), an app that lets you control your mouse cursor with a set of customizable key combinations. It supports all the usual mouse tricks, like moving the cursor, clicking, and scrolling; and it even lets you quickly move your cursor to another display—handy for folks who regularly work with multiple monitors. Perhaps best of all, you can use Keymo to highlight the mouse cursor with a "halo" so that you can easily see it against dark backgrounds.--MARCO TABINI



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LAUNCHBAR 5.5.2

\$35, \$14 FOR UPGRADES | OBJECTIVE DEVELOPMENT | OBDEV.AT

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MACDROPANY 2.10

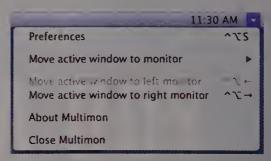
O DONATION REQUESTED | ZIBITY | ZIBITY.COM

Many cloud-syncing services, such as Dropbox, take any data you place in a specific, special folder on your Mac's drive and sync it across all your computing devices. This approach makes these services dead-simple to use. But you can sync almost any folder on your drive through the creative use of Unix symbolic links (which are similar to OS X's aliases) assuming you know how to create them. MacDropAny 2.10 (****) does all of that heavy lifting for you. Just open a folder in MacDropAny-by dropping the folder onto the utility's icon; by launching the utility and using its Open dialog box to select the folder; or by selecting the desired folder in the Finder and selecting Finder → Services → Sync Via MacDropAny. Next, specify the sync service you want to use and click OK. Choose where in your service's sync folder you want the link to go, and give the link a name. MacDropAny then creates the appropriate symbolic link in the proper location—and your data begins syncing to the chosen service immediately.-DAN FRAKES

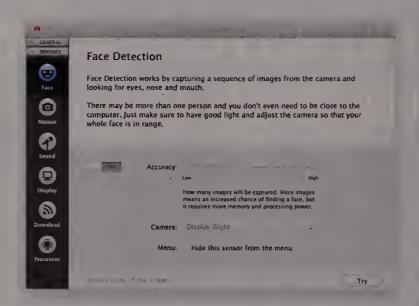
MULTIMON 2.51

\$10 | AARON NG | MULTIMONAPP.COM

Multiple-monitor support has never been great on the Mac. That's finally set to be fixed in the upcoming OS X Mavericks, but in the meantime, Aaron Ng's Multimon



(*****) eases the pain. Multimon adds a menu bar to your external displays, so you don't have to drag your cursor across multiple displays just to operate your apps. Multimon also enables you to move windows between displays with a keystroke. Just press <Control>-<Option> and then an arrow key to move the active window to another monitor. Best of all, Multimon remembers your window positions; so if you unplug an external monitor from a MacBook, and then plug it back in, all your windows return to the same position, instead of winding up a jumbled mess. If you work with multiple monitors, this app is a must-have.—JOSH CENTERS



SHOULD I SLEEP 1.8

\$2, PLUS \$3 FOR IN-APP PURCHASES | MARCELO LEITE | MRMILK.COM.BR

Should I Sleep (****) relies on six different sensors to decide when it should suspend your Mac's sleep settings. The app comes with one such sensor enabled; you can get the other five via in-app purchase (\$1 each or \$3 for all five). The face-detection sensor uses the camera built into your display to look for a face. The external display sensor blocks sleep whenever it detects that an external display or projector is plugged into your Mac. The Download monitor prevents sleep based on network traffic. The three other sensors react to processor usage, camera motion, and sound activity.—DAN MILLER

STATUS MAGIC 1.7

\$7 | SHINY DEVELOPMENT
SHINYDEVELOPMENT.COM

You're in the target audience for Status Magic (*****) if you take-and share-iOS screenshots. The app can remove the status bar entirely or superimpose one of your design. You can tweak the status bar's color and transparency, pick the kind of signal strength it shows, change the time, tweak the battery indicator, and more. When you're done, you can export one screenshot or all of them. Status Magic works fast and offers just the right options.-LEX FRIEDMAN









Universal Dual Band Wi-Fi **Entertainment Adapter with 4 Ports** TL-WA890EA





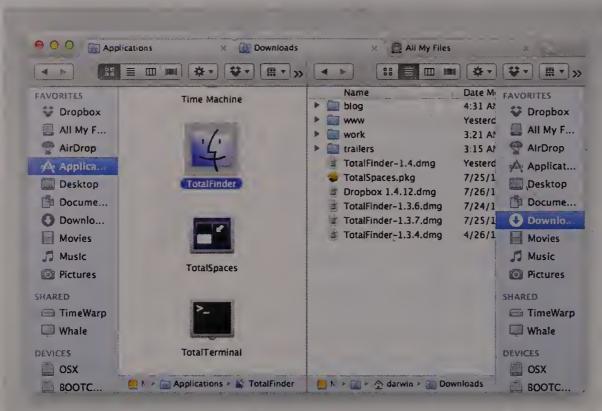


TV

BLUE RAY

DVR

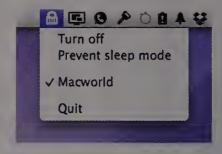
GAMING



TOTALFINDER 1.4

(\$18 | BINARYAGE | TOTALFINDER.BINARYAGE.COM

Apple's upcoming OS X Mavericks will at long last give the Finder some new features. But BinaryAge's TotalFinder 1.4 (****) offers the real power tools for users who need more control over their files. TotalFinder is a plug-in (really, a *modification*) for the Finder that goes way beyond tabbed browsing: Its Dual Mode displays two folders side by side in tabs to make shuffling files around easier; and the many preferences make the Finder fit into your workflow much better. You can also show system files, change how folders and files are listed together, and much more.—David CHARTIER



VPN AUTOCONNECT 1.0

• \$1 | NOVA-BOX NOVA-BOX.COM

The simple VPN AutoConnect 1.0 (****) sits in your Mac's menu bar and performs a single job: It keeps you connected to your virtual private network (VPN). Just choose Turn On from the menu, and whenever your VPN disconnects, VPN AutoConnect will re-initiate the connection. When you truly want to disconnect from the VPN-say, at the end of the day-just choose Turn Off from the app's menu-bar icon. It would be handy to have a global keyboard shortcut to toggle that status on and off, but that's about my only complaint.-DAN MOREN

WINCLONE 4.1

\$30 | TWOCANOES SOFTWARE | TWOCANOES.COM





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PRODUCTIVITY



CLEAR DAY 2.0

• \$2 | VIMOV | VIMOV.COM

When you first open Clear Day (****), you're practically hit in the face with a giant visual display of weather conditions in your currently selected city. The display cycles through different stock scenarios depending on



the weather, taking you from soaring through the clouds to rolling through a field of grass. You can see weekly and daily forecasts, and Clear Day also permits you to set parameters for severe weather alerts that will send notifications to your notification center. Clear Day's menu bar icon provides the basic weather information that most people are likely to need.—JEFF SANDSTOE



HEALTHIER 1.3.1

\$4 | LESSAPPS | HEALTHIER.LESSAPPS.NET

Sitting all day is bad for you-we all know this by now. Healthier (****), an app that resides in the menu bar, prompts you to take scheduled breaks so that you get up from your seat. You can set how often you'd like to be interrupted and how long the break should be. Clicking the menubar icon opens a window that displays the time remaining until your next break. During the break, Healthier takes over your screen, counting down the seconds until your break time is finished.-DAN MOREN



EASYENVELOPES 1.0.2

(\$10 | AMBROSIA SOFTWARE - AMBROSIASW.COM

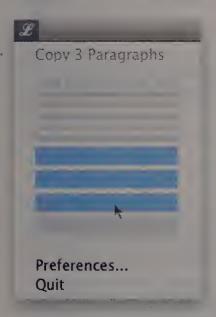
I spent hours this year fiddling with Photoshop templates to print out attractive envelopes for my wedding. Now I'm kicking myself for not using EasyEnvelopes (*******) instead. You can supplement the app's preset envelope sizes with your own, customizing names and sizes. The app can take care of many things for you—such as supplying your likely return address. It also lets you move that return address to the back flap of the envelope, use an image as your return address, and print using a mailing list from a Contacts group.—NATHAN ALDERMAN



HORUS NEWS READER 1.1

\$8 | FALLEN LEAF SOFT | FALLENLEAFSOFT.COM

square tiles containing the name of and art from the article. Using your mouse or trackpad allows you to easily swipe across the story list and choose which story you want to view next. After you click a story box, Horus opens the story in a new window and displays it there.—*JEFF SANDSTOE*



LITTLE IPSUM 2.0.2

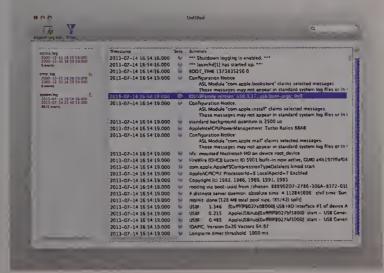
ONATION REQUESTED I DUSTIN SENOS I LITTLEIPSUM.COM

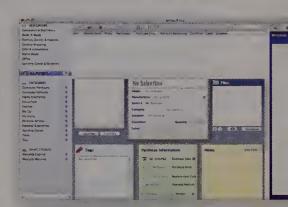
When you need to generate placeholder text—say, for Web development-Littlelpsum (****) can speed things up. A simple menu-bar app, Little-Ipsum stays out of your way until you need it. Click the menu-bar icon, and you can copy by the word (from one to five words), by the sentence (up to five sentences), or by the paragraph (up to four of them). It's a simple way to add bits of placeholder content to anything from blocks of text to menu items.-ALBERT FILICE

LOGDIVER 1.2.2

(\$8 | BLACKDOG FOUNDRY | LOGDIVER.COM

If software development or system administration is part of your daily routine, you likely have to deal with complex log files on a regular basis. LogDiver (****) helps you by offering a way to parse and filter log entries according to arbitrary sets of rules. The app comes with a selection of importers for common formats, like the one used by the Apache Web server, or by OS X's own system log. The filtering capability allows you to extract data based on multiple characteristics, such as a date range or pattern-matching on any of the fields stored by your logs. A convenient and intuitive WYSIWYG interface—somewhat reminiscent of Mail's rule builder—makes creating even the most complex filter a breeze. And the app's ability to quickly import and parse extremely large files can help give even the most seasoned IT professional a leg up on a complex problem.-MARCO TABINI





MYSTUFF PRO 2.0.12

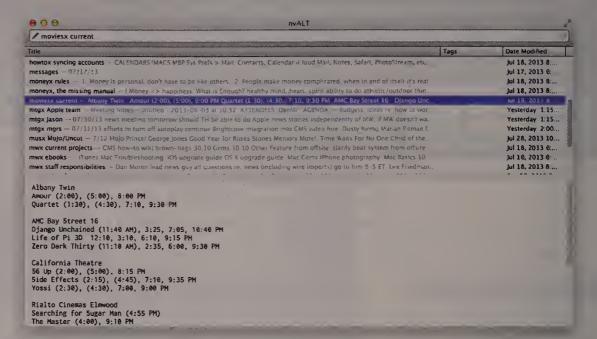
\$30 | MINDER SOFTWORKS MINDERSOFTWORKS.COM

If you ever need to document the contents of your house or office-to file an insurance claim after a robbery, for example—MyStuff Pro (****) can ease the process. It keeps track of all your possessions by grouping them into categories, recording their value, and even reminding you when warranties expire. You can input data about each item by using your Mac's or smartphone's camera to scan the item's UPC barcode. If a time comes when you need to provide an inventory, the app can produce a neatly printed spreadsheet with the necessary details.-MARCO TABINI

NVALT 2

ONATION REQUESTED | BRETT TERPSTRA | BRETTTERPSTRA.COM

Given that there are roughly a jillion text editors available for OS X, it takes a special one to stand out from the crowd-and nvALT (****¹; go.macworld.com/nvalt) is unmistakably special. It makes searching for and organizing your notes superfast and easy, thanks in part to its simple yet robust tagging system. Where the app really shines is as a catch-all repository for almost anything that can be written down in plain text. You have the option of keeping files in a single database, rather than in discrete files. Keyboard



jockeys in particular will love the way nvALT lets them do most everything without their fingers leaving the keys.—DAN MILLER



QUICKSAND 1.02

ODNATION REQUESTED | ZIBITY | ZIBITY.COM

Dropbox is convenient, but it requires you to curate files. Quicksand (****) keeps a copy of your recently opened files in one convenient spot. You simply specify how many of your recent files you want to keep a copy of and where you want to keep them. You can opt to place the folder in your Dropbox or other cloud storage, giving you access to the files from anywhere. All changes you make to the files are synced.—ALBERT FILICE

READKIT 2.2.1

\$5 | WEBIN | READKITAPP.COM

ReadKit 2.0 (****) for Mac is a well-equipped newsreading client that can handle a growing array of services. It supports Feedbin, Feedly, Feed Wrangler, Instapaper, NewsBlur, and Pocket. It even downloads feeds on its own without a syncing service. You can save and share articles via the services that OS X supports natively like Facebook and Twitter, as well as via Delicious, Instapaper, Pinboard, Pocket, and Readability. It also does a good job of supporting the unique features of some services, such as Pocket's separate filters for regular articles, videos, and image links that you've saved for later viewing. As a newsreader, ReadKit brings style and lots of customizable features to the table, while keeping most of its power out of your way until you want it. It's a great app for the post–Google Reader world.—pavid Chartier



SCENARIO 1.61

\$5 | LAGENTE SOFTWARE

Despite Apple's mixed signals on the subject, scripting is alive and well in the Mac arena, as people use it to automate all sorts of tasks.

Scenario (***) kicks things up a notch by allowing you to automatically execute a script when a given system event occurs. For example, you can trigger an AppleScript to execute at login, at logout, or

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even when a particular key combination is pressed. The app, which sits quietly in the menu bar until called on, is easy to configure and use, with a simple setting panel that lets you determine which scripts should execute in response to each of the available events. You can also enable or disable all actions by flipping a single radio button; activating them causes Scenario to relaunch automatically at login.—MARCO TABINI



TRANSMIT 4

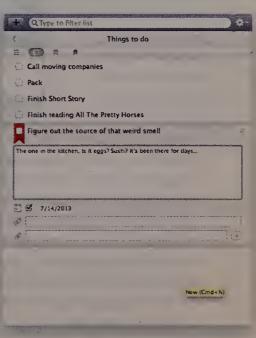
(\$34 | PANIC | PANIC.COM

Transmit 4 (******) makes the process of moving files to and from your FTP, Amazon S3, or WebDAV server feel as familiar as working in the Finder. You get two panes—your local files on the left, your server on the right—and you can drag and drop files, use Quick Look on supported remote files, and organize all of your websites and servers in folders. Transmit is jam-packed with file-transfer features for the 21st century, but it presents them in a surprisingly straightforward and accessible package. Give the free demo a try, and you'll find the app is well worth its price.—DAVID CHARTIER

TASKDECK 1.0.4

\$5 KARL TRAUNMULLER TASKDECKAPP.COM

Taskdeck (***12) improves on your Mac's built-in Reminders app, allowing you to prioritize tasks, attach images, create deadlines, and manage multiple lists. For anyone managing multiple projects, it's a great alternative to organizing through iCalendar. You can see clearly what is due and when, and you can attach the pertinent documents to the taska great time-saver. The app dwells discreetly in the menu bar, so it's always at hand and yet it doesn't clutter your screen. A pop-up window or audio alert to remind others of tasks or assignments that are overdue or impending would be a welcome addition; but for users who are seeking a robust yet easy-to-use task manager, Taskdeck is worth a look.-chris HOLT



CREATIVE



GLUI 1.3.2

📵 \$5 | SEBASTIAN RAZOLA | GLUI.ME

Glui (*****) allows you to quickly snap, annotate, and upload screenshots to its Glui.me service via your Dropbox account. Click it in your menu bar or Dock—and choose



whether to capture a cross-hairs snapshot, take a window snapshot, or use an image you've copied to your Clipboard. Once you've taken a screenshot, the Glui interface allows you to modify your picture with arrows, boxes, freehand drawings, text, and (my personal favorite) auto-pixelation. After you've modified an image to your liking, you can choose to send it via email or iMessage, tweet it, post it to Facebook, save it to your computer, or upload it to Dropbox. The app is incredibly simple, no bells or whistles to be found, and it excels as a result. It's the screenshot app I never knew I needed.—SERENITY CALDWELL

CLAQUETTE 1.1.1

\$30 | THOMAS ZOECHLING | SAUSE.AT

A picture may be worth a thousand words, but a video can be priceless, particularly if you're trying to record your Mac's screen—say, to show a remote user how to fix a computer problem. Claquette



(***) not only records your screen, but also captures live video and audio from a camera and microphone as it creates a movie from your desktop. You can export the recording in a variety of formats, or send it as a multilayered project to Apple Motion, where you can then edit it.—MARCO TABINI



DM1 1.1

(\$10 | FINGERLAB | FINGERLAB, NET





iDRAW 2.2

\$25 | INDEEO | INDEEO.COM

OPTIPNG 0.7.4

FREE | OPTIPNG TEAM | OPTIPNG.SOURCEFORGE.NET

With OptiPNG 0.7.4 (***) you can reduce the file sizes of PNG graphics files without any noticeable sacrifice in quality. The catch? It's a command-line utility, and you'll have to compile it yourself. But the fact that it's a command-line app also means that you can use it in an AppleScript or an Automator workflow, or set it up as a Folder Action; so images you drop into a certain folder will automatically be optimized. I found that OptiPNG reduced image file size by 30 to 50 percent, which is significant for larger images.-JOSH CENTERS

PHOTOBULK 1.5

* \$8 | ELTIMA | MAC.ELTIMA.COM

PhotoBulk (***) provides an easy way to process a large number of photo images at one time, under the same specifications. Photo-Bulk's simple interface lets you easily drag and drop files into its processing queue, where you can then set specifications for the images. PhotoBulk lets you apply custom watermarks, resize images, and set quality standards for all items in the queue. The speed of processing depends on the amount and size of the image files. Unfortunately, however, PhotoBulk doesn't support Raw files.-JEFF SANDSTOE





PIXA 1.0.4

\$25 | SHINY FROG | PIXA-APP.COM

Pixa (*****) is iPhoto for designers and writers. It's an image and inspiration organizer with a slick interface and tools for collecting other kinds of images that you care about. Pixa's interface shows your projects and folders on the left and all of your stuff front and center. It also supports and automatically updates Live Folders, which are folders of images located elsewhere on your Mac, outside Pixa's library. The app's real magic comes from its excellent collection, organization, and export tools. You can take screenshots of nearly anything, and Pixa can automatically tag images based on type (icons or vector), size, and even predominant color. Then you can create one-click export templates.—DAVID CHARTIER

ENTERTAINMENT





FLUTTER 0.5.54

● \$5 | BOT SQUARE FLUTTERAPP.COM

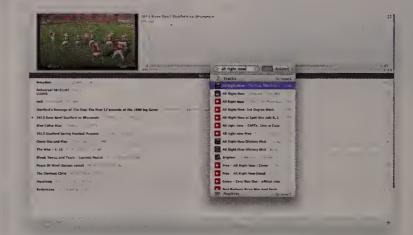
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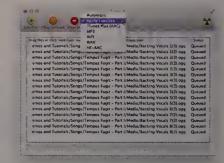
Christopher Breen, Serenity
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Frakes, Lex Friedman, James
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Dan Moren are staff editors at
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Chris Holt, Jeff Sandstoe, and
Marco Tabini are freelance
contributors to Macworld.

NASTURTIUM 1.0.6

(\$5 | NASTURTIUM LABS | NASTURTIUMLABS.COM

Nasturtium (****) is a YouTube and music player that lets you create hours of playlists without the hassle of switching apps or windows. You can drag and drop music and YouTube videos into the handy Nasturtium interface or use the mini player. The app is a bit finicky—copying and pasting the URL from YouTube worked much better for me than actually dragging and dropping the videos did. But Nasturtium's intuitive interface and robust search are nice pluses.—CHRIS HOLT





TUNESIFY 1.6.1

\$4 | ANDREW HEARD

iTunes and QuickTime can convert various audio files to other formats, but you need plug-ins to convert file formats like FLAC, Ogg Vorbis, and Windows Media Audio. Or you can skip the plug-ins and use Andrew Heard's Tunesify (***). Just launch the app, add supported audio files, and pick the format that you want to convert them to.—CHRISTOPHER BREEN

SOUNDBUNNY 1.0.3

• \$10 | PROSOFT ENGINEERING | PROSOFTENG.COM

Nothing is more jarring than to have sound blare unexpectedly out of your Mac's speakers—which can happen when you switch apps. SoundBunny (*****) protects you from these auditory assaults by letting you set the volume



level of each running app individually. Thus, your Beethoven symphony can play with the volume set to eleven, while Mail can notify you of new messages at a lower level. Due to OS X-imposed restrictions, however, SoundBunny can't control USB or FireWire speakers.—MARCO TABINI

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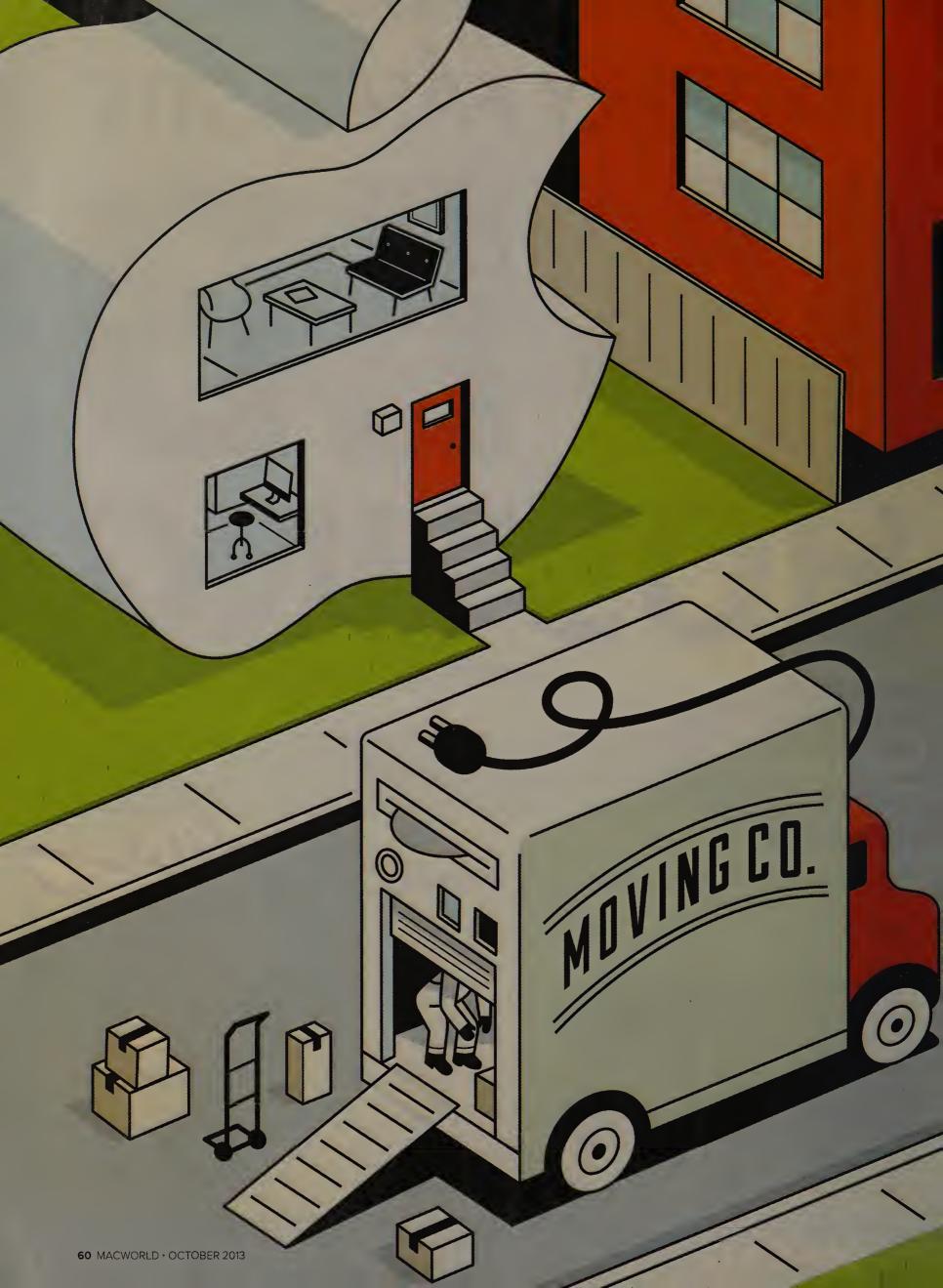
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Illustrations by Harry Campbell

At one point, all of us were new to the Mac. We all opened up that box and pulled out the new machine, and wondered if we'd be able to figure it out. If you're reading this magazine, chances are, you did.

As Apple has been fond of pointing out for ages, a huge percentage of the people who buy new Macs every year have never used one before. Which means lots of people are still having that first Mac experience. And you probably know some of them.

If so, you've no doubt been called on to explain things to new Mac buyers. You've probably helped with a few initial purchases, too. If you've ever worried about the advice you've given to the Mac newbies, you'll find answers here to their most common questions. You can read this story and advise them, or just clip it out and hand it to them. Either way, you'll help them get their bearings in their new Mac world.





ou've thought long and hard about it and have decided to make the switch from your Windows PC to a Mac. The hard part's over, right? You just traipse to an electronics boutique, slap down your credit card, learn the secret handshake, and you're a Mac owner.

Not exactly. Some questions remain to be answered. Where are Macs sold? Should you skip retail stores altogether and purchase your Mac online? Is it

possible to buy an older model for less money? And are post-purchase protection plans worth the money?

WHERE TO BUY A MAC

Macs aren't sold everywhere. Apple maintains tight control over who can sell its products—increasingly so since the Apple retail stores were launched.

The source: There are hundreds of Apple retail stores. To find the one nearest to you, visit Apple's Retail Store page

(apple.com/retail). You can also shop for your Mac at Apple's online store.

Third-party retailers: Apple isn't your only choice. You can buy a Mac in person at a Best Buy store and online at retailers such as Amazon.com, MacConnection, and MacMall. Also, Apple has established a network of Apple Authorized Resellers, stores that have permission to sell and service Apple products.

Government and educational discounts: Apple offers discounts for government agencies, military personnel, and educators and students. And the company usually offers a "Back to School" deal where you can get something like a free iPod touch when you buy a new Mac.

BUYING DIRECTLY FROM APPLE

Like any smart retailer, Apple wants the lion's share of the profit when selling a Mac, and so it provides itself perks that it doesn't share with other retailers. To begin with, when you order online, you can custom-configure your Mac-add more memory or storage, for example, or upgrade the processor. You can also choose to sign up for Apple's One to One service, where for \$99 a year (extendable to three years) Apple will not only transfer data from an old Mac but also offer training on a drop-in basis at an Apple retail store.

Apple also sells refurbished models for a discount (more about this later), which is something other retailers can't do. And Apple performs many repairs and replacements on-site, whereas authorized retailers often have to return problem products to Apple for exchange or repair.

The third-party advantage: Apple doesn't hold all the cards, however. When you purchase a Mac from Apple's online store, Apple charges state sales tax where applicable. Some other online retailers don't (though you may still owe money to the tax collector). These retailers offer the same warranty that Apple does. Additionally, some physical stores with Apple Authorized Reseller status will migrate data from one Mac to another for free. In a small store, it's easier to establish a personal relationship with the owner and employees. And those people aren't limited to telling you only what Apple wants you to hear.

They often have advice for working around issues that Apple employees can't discuss.

REFURBISHED MACS

Because all returned Macs eventually make their way to Apple, the company has the ability to repair and restore returned units. These weren't necessarily broken computers—Macs are returned for a variety of reasons. Regardless of the state the Mac

If your Mac has a built-in display (a laptop or iMac), AppleCare is worth the cost.

was originally in, Apple brings it up to like-new condition, equips it with the same warranty as a new Mac, and prices it, on average, a few hundred dollars less. You can find Apple's refurbs on the Apple site (go.macworld.com/apple_refurb).

ALL ABOUT APPLECARE

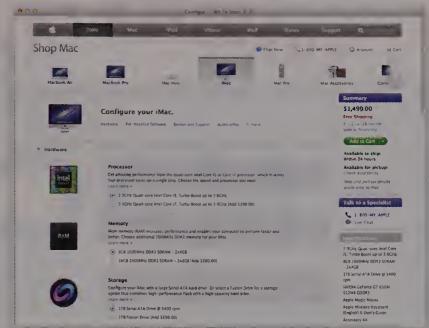
With the purchase of an Apple product, the company offers a one-year limited warranty and 90 days of free telephone support. AppleCare is an add-on service and support plan that extends the coverage on your Apple product.

What it cov-

ers: For Macs and Apple displays, this coverage extends to three years from the original purchase date. For iOS devices and Apple TVs, coverage extends to two years from purchase. If you buy

an Apple display at the same time that you purchase your Mac, AppleCare coverage for the Mac also covers the display.

The coverage includes phone support for the length of the plan, carry-in service to Apple retail stores and authorized service providers, drop-off at UPS stores in the United States for iPods and iPhones, direct mail-in service, on-site service for desktop computers, and parts delivered to you for things that can be easily replaced. During the coverage period, repairs are free except in instances when it's clear the problem was caused by user negligence.



Custom Fit Shop at the online Apple Store, and you can customize your Mac's configuration.

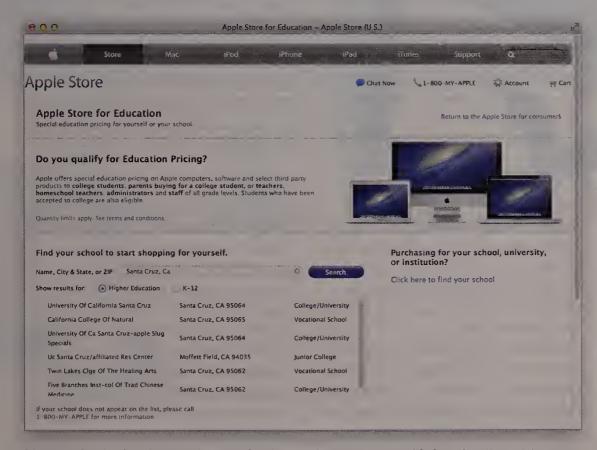
What it costs: The price of AppleCare depends on the device for which you purchase coverage. For example, AppleCare for a Mac mini is \$149, an iMac's coverage costs \$169, and a 15-inch Retina display MacBook Pro is \$349.

Whether AppleCare is worth it depends on whether your Apple product has serious problems during the coverage period. If it operates trouble-free, you may feel like you've thrown away your money. However, if a display goes bad or a motherboard gives up the ghost, you'll be thrilled to be covered when you learn that you'd otherwise pay three times the price of an AppleCare plan for the repair.

When it's definitely worth the investment: A reasonable rule of thumb is that if your Mac has a built-in display (a laptop or iMac), AppleCare is worth the cost, as repairing a display is never cheap. AppleCare for an iOS device is a tougher sell, as problems with those devices usually surface within the first six months, though the AppleCare+ plans that cover such devices include coverage for two "accidental damage due to handling" incidents.

WELCOME

Apple makes great stuff that's fun and easy to use. It's hard not to be enthusiastic about a new Mac. Now that you know where to get yours (and how to protect it should . something bad happen), welcome aboard.



Discount Deals If you're a student or a faculty member, you may qualify for education pricing.



f you're switching from a PC to a Mac, one of the first things you'll want to do is to move all your data to your new computer. The process is fairly simple, but you can go down any of several paths depending on your setup and your needs.

CONSIDER WHAT'S IN THE CLOUD

Before deciding on a data-transfer strategy, consider the extent to which the data on your PC is already mirrored in the cloud. For example, if you store most

of your personal files in a folder that syncs to the cloud via a service such as Dropbox, you can install the corresponding Mac app, log in with your existing account, and then sit back while your files sync automatically.

Likewise, if you store all your email on an IMAP server, you need only enter your credentials for that server in a Mac email client such as the built-in Apple Mail, and all your messages will download to your Mac. And if you rely on Google Docs for

word processing and spreadsheets, your documents will be right there in whichever Mac browser you choose.

Take a quick mental inventory of your data. Be sure to consider personal data such as email, contacts, calendars, and bookmarks; media such as music, photos, movies, and TV shows; and documents you've created or downloaded. If most of that material is already somewhere in the cloud, the path of least resistance may be to connect to the same cloud services on your Mac, and then manually transfer any remaining items that live on your PC's hard disk and nowhere else.

If your PC stores most of your data locally, you can choose among three main approaches to get it onto your Mac:

TAKE THE EASY WAY OUT

When you buy a new Mac directly from Apple (either at an Apple store or online), you have the option to pay an extra \$99 for Apple's One to One service. In addition to a full year of training on Apple products, this program includes a onetime data-transfer service. Simply take your old PC to your nearest Apple Store, and someone will transfer your data, install any Apple software that you've purchased, and help you with any initial setup or usage questions.

The nice thing about the One to One service is that you not only get your files and data on a Mac, but you also have access to immediate, on-the-spot professional help. You can make appointments for ongoing classes and training, too, which can ease the transition to a new platform.

USE A VIRTUAL ASSISTANT

When you turn on a new Mac for the first time, a setup assistant runs to help you connect to the Internet, create a user account, and configure a number of important settings. As part of this process, the app asks if you want to transfer data from another Mac or PC. If you decide to skip the data-transfer step, you can accomplish the same thing later by opening Migration Assistant, a utility found in your Mac's /Applications/Utilities folder. Other than letting someone else do the work, using Migration Assistant (in

Cooler Master

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1 JAS Mini MINI PORTABLE STAI



either form) is the easiest way to move data from a PC to a Mac.

Migration Assistant doesn't move files blindly from one computer to another. It intelligently sets up your Mac to resemble, as nearly as possible, your PC's configuration. For example, email, contacts, and calendars (and their associated accounts) might migrate from Outlook on a PC to Mail, Contacts, and Calendar, respectively, on a Mac; bookmarks in Internet Explorer are re-created in Safari; documents move to analogous locations on your Mac; and even your desktop background picture usually transfers.

To use Migration Assistant, make sure your PC and Mac are on the same Wi-Fi network or, for faster transfers, connect them with an ethernet cable. Then, on the PC, download and install the Windows Migration Assistant. Run that app on your PC and Migration Assistant on your Mac. Follow the prompts on both computers to transfer data; for step-by-step instructions, see "About Windows Migration Assistant" (support.apple.com/kb/ht4796).

MOVE DATA MANUALLY

If you have only a small amount of data to transfer, or if you want complete, manual control over the process, you can connect your PC and Mac over a wireless or wired network and use file sharing to make the PC's files available to the Mac.

On the PC, confirm that you have enabled file sharing and have shared the folder (such as your home folder) you want to access on your Mac. (For full instructions, visit go.macworld.com/pc_sharefile)..

Then, on your Mac, open a new window in the Finder. In the sidebar under Shared, click All. Select your PC, click Connect As, enter the username and password you set up on your PC, and click Connect. The folder you shared on your PC should appear in the Finder on your Mac; you can then look through it for the items you want to copy, and drag them to the location of your choice on your Mac.

Senior contributor Joe Kissell is the senior editor of TidBits and the author of the ebook Take Control of Troubleshooting Your Mac (TidBits Publishing, 2012).

TRANSLATING WINDOWS TO OS X

If you used this in Windows		Look here in OS X		Shortcuts	
.	Audio Controls	r Chan	System Preferences → Sound	Use the volume controls on your keyboard.	
	Backup and Restore Center (Win 7), File History (Win 8)	0	System Preferences → Time Machine		
	Control Panel (Win 7), Settings charm (Win 8)		System Preferences	Select Apple menu → System Preferences or click System Preferences in the Dock.	
	Documents		Home folder	Your Home folder (also known as your user folder) looks like a house.	
· · · ·	File Explorer	4	Finder	Select Finder → New Finder Window to browse your files.	
	Flip 3D (Win 7)		Mission Control	Press <f3> on newer Macs; on older Macs, press <f9> or <fn>-<f9> on a laptop.</f9></fn></f9></f3>	
	Gadgets and Sidebar (Win 7)	29	Dashboard	Press <f12>.</f12>	
	Microsoft Word	iWerk	Apple's iWork; Microsoft Office for Mac	iWork apps are available separately for \$20 each, in several varieties. Microsoft Office for Mac is available at pricing from \$10 per month to \$220.	
	Network and Sharing Center		System Preferences → Network	Access controls through the Wi-Fi status menu in your menu bar.	
No.	Notepad	in 1	Notes or TextEdit	Look in your /Applications folder.	
ennante de la constante de la	Preview Pane ,	()	Quick Look	Select a file and then press the spacebar to activate Quick Look.	
	Printer settings		System Preferences → Print & Scan		
	Recycle Bin		Trash	Find the Trash in the Dock.	
P	Search (Win 7), Search charm (Win 8)	Q	Spotlight	Press 第-Space to jump to the Spotlight search field. Or, click the magnifying glass at the top right of your screen.	
B	Snipping Tool			Press % Shift>-3 to take a picture of your whole screen; press % - Shift>-4 to capture an image of an area.	
	Start menu (Win 7)	37	Apple menu, Launchpad	Find Launchpad in the Dock.	
**************************************	Start screen (Win 8)	3,9	Launchpad	Look in your /Applications folder or the Dock.	
# 6 m	System tray	± + % + 10	Top right of menu bar (system and third-party icons)		
Francisco de la companya de la compa	Task Manager (Win 8)	Ma	Activity Monitor	Find Activity Monitor in the /Applications/Utilities folder. If you just want to quit a stuck program, press #- <option>-<escape> to force-quit it.</escape></option>	
83	Windows Live Messenger		Messages	Lòok in your /Applications folder.	

BRING YOUR

HARDWARE TO THE

MAC

BY DAN FRAKES



hen switching to a Mac, you'll likely worry most about software compatibility, but don't forget all your hardware—the PC accessories and addons you've invested in over the years. Here's what you need to know about getting that gear to work with your Mac.

KEYBOARDS

Any USB or Bluetooth keyboard will work with a Mac. Some keys work differently on the Mac, however, and a Windows key-

board won't include the special-function keys you'll find on Mac-specific keyboards.

If you frequently use keyboard short-cuts, you'll discover that while shortcuts in Windows typically include the <Ctrl>key, OS X shortcuts more often employ the # key. If you're using a Windowsformatted keyboard with a Mac, the <Windows>key functions as the # key; similarly, the <Alt> key functions as the Mac's <Option> key. (You can change the mappings by going to the Keyboard pane of System Preferences and clicking



BY OWC LARRY | blog.macsales.com

Why Wait for the New Mac Pro?

Create a lightning-fast workhorse with OWC today!

We're excited about the impending release of the newly announced 2013 Mac Pro, but your current Mac Pro may have more potential under the hood than you thought. Many people simply don't take advantage of the upgradeability of their Mac Pro, and OWC makes upgrading easy with free install videos and U.S.-based technical support.

When you run low on memory, everything moves slower than it should. Adding OWC memory provides night-and-day performance gains up to 64GB in the oldest Mac Pro and up to 128GB in the latest. Our most popular 16GB and 32GB memory upgrade kits are available from as low as \$149.00, making that massive performance boost darned affordable.

The current Mac Pro has an advantage over the 2013 Mac Pro in that it can be internally upgraded with up to 16.0TB of drive storage capacity, using 4.0TB hard drives from OWC. You can also upgrade to an OWC Accelsior SSD with up to 2.0TB of storage and 600MB/s for the ultimate performance speed boost.

Need more graphics power? Upgrade your graphics card with several new models recently released. OWC eliminates compatibility guesswork by stocking video cards designed specifically for Mac Pro. OWC never stocks "hack cards." When you buy a video card from OWC, you can rest easy knowing it will work with your Mac Pro.

Need USB 3.0, eSATA, SAS or more? The expansion slots in your Mac Pro are there for a reason, and you can upgrade with any of the great Mac-friendly PCIe expansion cards offered by OWC.

Learn more and see upgrades in action for your MacPro at www.macsales.com/MacProBooster

Modifier Keys on the Keyboard screen.)

Finally, many Mac-formatted keyboards have special functions assigned to the F-keys. These keys let you adjust volume, control media playback, and access OS X's Mission Control. You can't trigger these functions on a Windows keyboard by default, although if you pick up third-party software such as Keyboard Maestro (go.macworld.com/keyboardmaestro), you can assign the actions to keys.

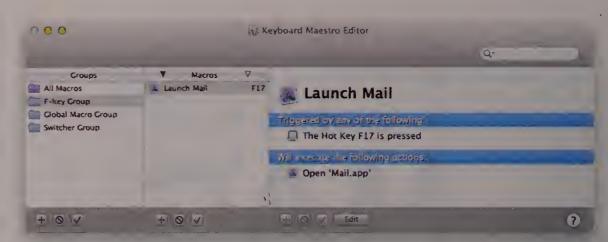
MICE

As with keyboards, any USB or Bluetooth mouse will work with the Mac; you'll be able to click and right-click just as you did under Windows, and if your mouse has a scroll-wheel, that will work, too. You can control the mouse's basic features in the Mouse pane of System Preferences.

Note that in OS X 10.7 Lion and later, scrolling works the opposite of what Windows veterans are used to: When you spin the scrollwheel toward you, the window's content scrolls down. You can revert to traditional scrolling by using the Scroll Direction setting in Mouse preferences.

HARD DRIVES

A Mac can read from and write to a hard drive formatted for Windows as FAT32 (but



Get Help Add special functions to your Windows keyboard with Keyboard Maestro.

not as NTFS), assuming that you can connect the drive to your Mac. This includes any external hard drive that attaches through USB, FireWire, or Thunderbolt. (If you have added an eSATA port to your Mac, you can use eSATA drives, too.) However, Windows-formatted drives don't support all Mac features. For example, some file metadata—but not the file data itself—is lost when you copy files to a Windows-formatted drive, and you can't use a Windows drive as a startup drive or backup drive for a Mac. Conversely, Windows PCs can't read Mac-formatted drives without help from special software.

Such limitations mean that if you want to

use an existing external hard drive with both your Mac and your Windows PC, you should keep it formatted for Windows and use it mainly for basic document storage. But if you'll use the drive only with a Mac, you'll want to reformat the drive, using Disk Utility, specifically for the Mac.

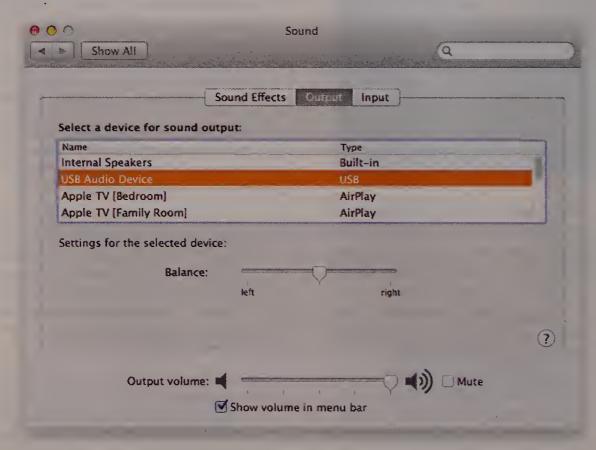
PRINTERS

OS X ships with drivers for most popular printers—you should be able to plug in your USB printer, or connect your Wi-Fi or ethernet printer to your network, and print immediately. Just go to the *Print & Scan* pane of System Preferences to set up the printer. If OS X doesn't have the correct software, it will usually download and install the correct drivers automatically when you set up the printer.

SPEAKERS

Pretty much any computer speakers (or other audio systems) will work with a Mac. If your speakers use an analog audio cable, just plug that cable into your Mac's 3.5mm audio-out jack. Although the audio automatically routes to the speakers and the Mac's internal speaker is disabled, you can adjust overall volume using your Mac's volume controls. Similarly, if your speaker uses a 3.5mm optical-digital connection, you can connect the digital-audio cable directly to the same jack on your Mac.

USB speakers also work with the Mac. Connect your speaker's USB-audio cable to the Mac's USB port, and OS X should route audio to the speaker system. If it doesn't, you can choose the USB speaker system as your audio output by opening the Sound pane of System Preferences, clicking the Output tab, and then choosing the USB speaker system as the output device.



Adjust Audio Change the Sound Output setting to listen to your music through external speakers.



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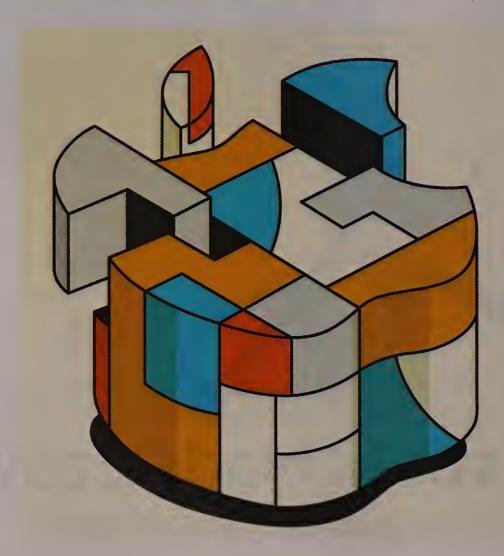




SECURITY BASICS

OF THE

BY RICH MOGULL



hen it comes to security, the latest versions of Windows and OS X are comparable, but you still have a few key differences and settings to become familiar with.

OS X 10.8 is very secure overall. It includes many of the same inherent protections as Windows 8 does. Antiexploitation technologies, firewalls, sandboxing, and other tools are built in, with mostly sensible default settings. Apple also includes

interesting security features that take advantage of the Mac App Store to further reduce your security risk.

Here's a basic guide to your Mac's built-in security features.

SAME SETTINGS, NEW LOCATIONS

The core principles for safe Internet computing remain the same, whether you use a Windows PC or a Mac. Although you have many ways to fiddle with your Mac's security preferences, we're going to focus on the most important ones and highlight key differences from Windows.

System Preferences: You manage most security settings through the System Preferences application, located in the Applications folder. You can also find a shortcut to System Preferences in the Apple menu and, by default, in the Dock.

Software Update: To stay safe, we recommend keeping your application software and system software up-to-date. You can choose whether the computer should automatically check for and download such updates by going to System Preferences → Software Update.

All of your system software updates come through the Mac App Store. Your Mac prompts you with a system notification when new updates are ready. You can also see what updates are available at any time by going to the Apple menu and choosing Software Update.

User accounts: Managing user accounts is similar in the Mac OS and Windows; OS X just has a slightly different organization strategy. Some settings are in the Users & Groups system preference pane, while others are in Security & Privacy.

By default, your Mac allows for guest access, which permits friends and other quests to work on your Mac in an empty user account. When your friend finishes and logs out, the account is wiped. You can manage this feature in Users & Groups; to control when passwords are required, however, you have to go to Security & Privacy → General.

Firewall protection: Your Mac's built-in firewall isn't quite as robust as the Windows one, as it won't automatically adjust itself based on the network you are on. This limitation is okay, though, since network attacks aren't nearly as common as they used to be.

Go to System Preferences → Security & Privacy → Firewall to turn on the firewall; it works similarly to the Windows Firewall by default, blocking incoming connections on a per-application basis. If you prefer, you can also block all connections under Firewall Options.

Unlike Windows, your Mac doesn't include an outbound firewall, but you can





add one if you wish by installing a thirdparty tool such as Objective Development's Little Snitch (go.macworld.com/snitch).

Antivirus support: Your Mac includes a (very) basic antivirus feature (called XProtect or File Quarantine) that operates in the background to keep you from running into trouble while you're browsing the Web. This bundled utility is similar to—though not as powerful as—Microsoft's Security Essentials.

Safari, Apple's built-in Web browser, doesn't have all the same protections found in the latest version of Internet Explorer, but it still offers several great security options, such as the ability to allow Java—an oft-hacked technology available as a plug-in—only on specific sites. By default, Java isn't even installed on your Mac, so you can eschew using it altogether if you prefer.

Easy Access Manage most security settings through the System Preferences menu.

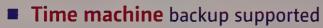
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Experience the Mac-friendly OS



BUILT-IN SECURITY

OS X includes two powerful security features that aren't available on consumer versions of Windows.

Full hard-drive encryption: Encrypt your entire hard drive (and external hard drives) with FileVault. You can find it by going to System Preferences → Security & Privacy → FileVault. It's similar to Microsoft's BitLocker—but that utility is available only in the Windows Enterprise and Ultimate editions, whereas FileVault is available for all OS X users.

FileVault is reliable, and generally does not affect system performance. It's ideal for laptops, and it even includes a recovery option that you can use in case you forget your password.

Gatekeeper: The Gatekeeper feature (go to System Preferences → Security & Privacy → General and look under Allow Applications Downloaded From) restricts what kind of software you can install on your Mac. By default, you can download and launch software only from the Mac App Store and from websites of registered third-party developers. You can change these settings to open up your Mac to software from any location.

You may be tempted to allow all apps, but we suggest leaving the default setting as is and opening any app that doesn't qualify (but you know you want to install) by <Control>-clicking it and then choosing Open. By doing so, you tell Gatekeeper that you purposefully want to bypass its security controls when opening this specific app.

TO ANTIVIRUS OR NOT?

The biggest security question we get from people who first switch to a Mac is: "Should I install antivirus?" The answer, for most users, is no—with a few caveats.

If you use Gatekeeper, leave Java disabled, and use an email service—such as Gmail or iCloud—that filters out known malware, the odds of your Mac ever becoming infected with malware are

OS X has two security features that aren't available on consumer versions of Windows.

minuscule. Switch to Google Chrome, and you further reduce those odds.

Why can you get away with no antivirus software on a Mac? Some antivirus firms say they see 65,000 new Windows malware variants every day, while Macs get a handful or two every year.

Overall, your Mac's security requires much less active effort on your part to maintain than a Windows system does.

Rich Mogull is an industry analyst and the CEO of Securosis, and formerly a research vice president for Gartner. He is also the security editor at TidBits.



ISTRATION BY PETE RYAN

Working Mac

Tips, Tricks, and Tools to Make You and Your Mac More Productive



Fabulous Finder Commands You Should Be Using

To reveal hidden commands, all you need are a few magic keys.

BY SHARON ZARDETTO

hink the Finder's menu commands are simple? Think again.
Add to your desktop repertoire by using hidden menu (and keyboard) commands. All you need to make them appear is the correct magic key: <Shift>, <Option>, or <Control>.

Open Files With the App You Choose

A file usually knows which app created it, so when you double-click the file, that app opens. But what if you don't have the program, or you'd rather not use the default? A JPEG image, for instance, can open in Apple's Preview, Adobe Photoshop, or a Web browser. A text file might

open in Apple's TextEdit, Bare Bones Software's BBEdit, or Microsoft Word. You can override the default by using the *File* → *Open With* command and choosing from the submenu. Or <Control>-click (or right-click) a file, and choose *Open With* in the contextual menu.

To make your chosen program the new default for a particular document, press <Option> to change the contextual menu's

Open With to Always Open With. Forever afterward, that document will open in the app you chose from the contextual menu.

Bonus tip: Sometimes you may want to open a certain type of file in a specific program every time. For instance, you might prefer that JPEGs open in Photoshop. Select a JPEG and choose File > Get Info. In the Info window's Open With section, select an app from the dropdown menu, click Change All, and click Continue in the confirmation dialog box.

Open Folders and Files in Wily Ways

Want to open a folder? You have some options. Select a folder in a Finder window, open the *File* menu, and press <Control> to change the *Open* command to *Open in New Window*. You get to keep the original window around for further work, and the new window displays the folder's contents the way you last left them—say, in a short-but-wide, Icon-view window in the lower right of the screen—instead of applying the current window's settings. If you prefer, press # as you double-click a folder to produce the same effect.

Whenever you need to open a folder as you left it, but want to avoid having two open windows, use the <Option> key to change the *Open* command to *Open in New Window and Close*. The original window will close as the new one opens.

When you've selected a file, pressing <Option> changes *Open* to *Open and Close Window*. This command sounds like a practical joke, but it is just practical, since it opens your document and closes its no-longer-needed window in the

Sure, you can copy and paste files and folders in the Finder with the Edit menu's basic Copy and Paste commands. But you have another way.

ile		File		File	
New Finder Window New Folder	N器 N器①	New Finder Window New Folder	業N 企業N	New Finder Window New Folder	N器 N器位
New Folder with Selection	↑器N	New Folder with Selection	^%N	New Folder with Selection	~#N
New Smart Folder New Burn Folder	N#7	New Smart Folder New Burn Folder	Z#N	New Smart Folder New Burn Folder	N#7
Open	#O	Open in New Window	^ # Q	Open in New Window and Close	0%7

Finder. Another approach to this clean-asyou-go procedure is to press <Option> when you double-click a folder or file.

Go Beyond the Basic Info

File → Get Info opens the selected item's Info window, which shows the item's kind, size, and created and modified dates; you can change the item's icon, label color, and other things too. Press <Control>, though, and the command changes to Get Summary Info. Press <Option>, and it becomes Show Inspector (or Hide Inspector if it's showing). What's the difference?

If you've selected a single item, there's no difference between Get Info and Get Summary Info. But say you want to move several large files to a USB stick and you need to know whether they'll fit. Select the files, press <Control>, and click File > Get Summary Info. You get a Multiple Item Info window that summarizes the group selection, including the files' total size. Here you also can set some options on the items, changing their label color, locking or unlocking them, setting the Open With app, or even changing their icons. (How do you change an icon? Click the icon at the top of the Info window of a file whose icon you like, and choose Edit → Copy. Select the icon in another file's Info window, and choose Edit → Paste.)

The Finder's Inspector window is a hidden gem. Select one or more items, hold <Option>, and choose *Show Inspector*. At first glance, this window seems to be a duplicate of the Info window. But a closer look reveals that it has a different title bar—thin and squared off. And sure enough, it behaves as a palette, remaining on top of all other Finder windows. Its real power, however, is that it changes to reflect whatever selection you make in the Finder. As a result, you don't have to open and close individual Info windows to inspect file and folder information.

Move Items Without Dragging

Sure, you can copy and paste files and folders in the Finder with the Edit menu's basic *Copy* and *Paste* commands (#-C and #-V). But you have another way.

Press <Option> to change the *Paste Item* command to *Move Item Here*. (Its keyboard shortcut, #-<Option>-V, adds <Option> to the *Paste* shortcut.) Using this method is much easier than dragging an item to a new location when the target window isn't already open. For more details about special uses for *Copy* and *Paste*, see go.macworld.com/copypaste.

Use Global Window Commands

You can change or close all Finder windows in one fell swoop by adding <Option>. For example, select the *Window* menu and hold <Option>; the *Minimize* and *Zoom* commands become *Minimize* All and Zoom All. Use the same trick to change the File → Close Window command to File → Close All.

The Magic Keys The File menu's standard Open command changes to 'Open in New Window' when you hold down the <Control>key, or to 'Open in New Window and Close' when you press the <Option>key.

Bonus tip: Click the red, yellow, or green button at the top of any window while holding <Option> to close, minimize, or zoom all open windows.

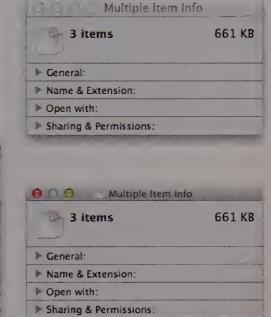
Add to the Dock Without Dragging

On a big screen, you have to drag a long way to move an icon to the Dock. Instead, select the icon, and press <Shift> to change File + Add to Sidebar to File + Add to Dock.

Deselect Everything

When you've made selections in a List view window that has no empty space, deselecting everything isn't easy—unless you use <Option> to change $Edit \rightarrow Select All (\%-A)$ to $Edit \rightarrow Deselect All (\%-Coption>-A).$





Several Ways to Get Info Select three documents and then choose File → Get Info to see three individual Info windows (left). Press <Control> to reveal the Get Summary Info menu command, which opens a single aggregate window (top right). Pressing the <Option> key reveals the Show Inspector menu command, which opens the palette-like Inspector window (bottom right); this window changes in response to what you select in the Finder.

Embracing the Nearly Paperless Future

One author makes peace with the fact that paper just won't go away.

BY JOE KISSELL



n my home office, I have a nice document scanner. I have great OCR and document-management software. I have a solid system for converting paper into digital documents. I hardly ever print anything. I even wrote a book on the paperless office. And yet, somehow, I still have tons of papers, and despite my best efforts, more appear all the time. What's happening?

Believe it or not, the business world is making slow but steady progress toward paper reduction. For example, the use of office paper decreased by 40 percent between 2000 and 2011, and it's increasingly rare to find banks, utilities, and other services that do not offer paperless billing and payments. Those of us who run small companies may be in an ideal position to push things further. After all, unlike managers in big corporations, we have greater

latitude to set our own rules—and less inertia to overcome.

The biggest barrier to a paperless office, however, might be the word paperless itself. If using any paper at all, ever, means that you fail to meet the definition of paperless, maybe we're thinking about this concept the wrong

You may not be able to achieve a completely paperless life, but that doesn't mean the paperless office is a myth or a failure, any more than the fact that you can still drive a car makes airplanes a failure.

way. You may not be able to achieve a completely paperless life, but that doesn't mean the paperless office is a myth or a failure, any more than the fact that you can still drive a car makes airplanes a failure. Going paperless doesn't have to be all or nothing to be effective.

Examine Your Goals

Why do you want to go paperless, anyway?

Back in the 1970s, executives recorded memos on tape and paid people to type the memos up, photocopy them, and circulate them by hand. Communicating with the public involved writing a lot of letters, each of which had to be sealed, stamped, mailed, opened, replied to, and so on. Filing systems required vast amounts of space, and finding previously filed papers often took a long time.

In short, dealing with paper was a huge drag on productivity in those days, and a

future without such annoyances was what a lot of people were hoping for. All those problems have greatly diminished, and some of them have virtually disappeared. We may still have lots of paper, but we have less paper-related pain. If your goal in maintaining a paperless office is to achieve greater productivity, you may find it more useful to focus on that objective than on the paper itself.

For example, if you receive lots of printed documents and your main problems are finding information in them and figuring out where to file them, the scan-OCR-shred routine will serve you well. Though it won't reduce the amount of paper you encounter, it will address the inconveniences you struggle with.

Then there are the trees. Environmental objectives, including saving forests and reducing waste, certainly provide noble reasons for decreasing paper usage. Agonizing over whether you should print out a single two-page document isn't worth it, however. You'll have a much larger impact if you concentrate on the bigger offenders.

Surrender to the Ironies

No matter how hard you try, the path to paperless seems to be paved with, of all things, more paper.

Consider the following true story.
When I bought my iPhone 5 from Verizon earlier this year, I immediately signed up for online account access, automatic payments, and paperless billing. A few days later, I opened my mailbox to discover three separate envelopes from Verizon. Inside each was a letter confirming my enrollment in one of these services designed to reduce the amount of paper I receive. That's right: Verizon felt it necessary to send me several letters to tell me how environmentally friendly they were being by no longer sending me paper bills!

I could tell you similar stories about my banks, insurance companies, and so on, all of which insist on sending me mounds of needless paper. I recognize that sometimes these companies may be bound by unavoidable legal notification requirements. I'm just saying: You might have to accept a tiny step backward for every few giant leaps forward, and on balance that's not a bad thing.

Focus on Finding Things

For me, a paperless office is more about convenience than anything else. Digital documents are easier to search, share, and back up than paper documents, and they take up essentially no space. Scanning documents, converting them into searchable PDFs, and then shredding or recycling the originals (to the extent possible) addresses those needs brilliantly.

Of course, scanning doesn't reduce the volume of incoming paper. If I had less of it to handle in the first place, I would be happier still, and that's something I'm working toward. I have already opted in to electronic statements for every service I use that offers them, I send invoices to my clients by email, and I usually "sign" simple contracts, NDAs, and other agreements by superimposing a scanned signature with Smile's \$100 PDFpenPro 6 (***); go.macworld.com/pdfpenpro).

Change Your Habits

Recently, I exchanged business cards with half a dozen people at a table, and I immediately felt stupid for doing so—there's an app for that! Sure, I can scan this stack of cards on my desk, but I could just as easily have snapped a photo of them with a scanning app on my iPhone or iPad such as Creaceed's \$5 Prizmo (go.macworld.com/prizmo) and handed the cards right back. The same goes for receipts, product literature, and all the other miscellaneous pieces of paper I tend to grab without thinking. I have the technology; the more significant obstacle is my resistance to changing my habits.

Nearly Paperless, and Proud

My office isn't completely paperless, and it probably never will be. But I won't sweat it. I'll keep scanning until there's no more incoming paper, and I'll bask in the knowledge that without tedious tasks such as filing, faxing, stamping, and mailing, I'm already living in the nearly paperless future.



Stand With Style

Ready to stand while you work? Focal Upright's Locus Workstation might suit your style. The \$1290 Locus desk can accommodate anyone who is between 4 feet, 1 inch and 6 feet, 8 inches in height, and it features a large hand crank that changes the pitch of the desk's surface from completely flat up to an angle of 15 degrees. Although studies have shown that standing is more beneficial than sitting, taking regular breaks from standing Is important, too. Focal's \$690 Locus Seat matches the workstation and offers an interesting option. The perch, which resembles a bicycle seat set on top of a stool, puts you in a unique position—neither fully seated nor completely standing. The experience is similar to sitting on a fitness ball.

The Focal Upright Locus
Workstation is a complete, heightadjustable standing workstation
whose functionality is matched
only by its sleek design. It may
not fit into every budget, but for
anyone who is looking to invest in
an ergonomic workstation, it is an
excellent choice.—BRENDAN WILHIDE

Our Top Five Dropbox **Tricks**

Tips for the indispensable filesynchronization service.

BY MACWORLD STAFF

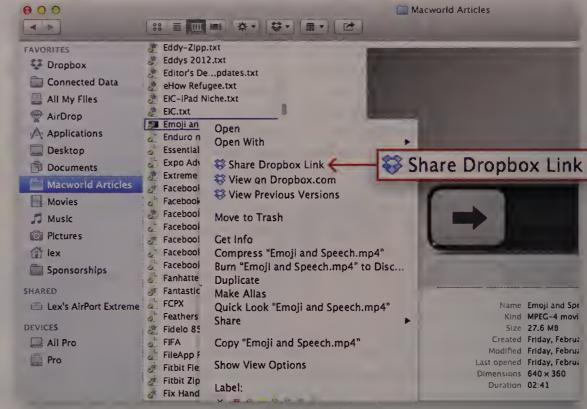
f you were to ask Macworld editors to name the technologies they can't live without, you'd inevitably hear about Dropbox (www.dropbox.com). This file-synchronization service lets you access your files from anywhere—not just from your Mac, iPad, and iPhone, but also from any Web browser. It provides easy cloud-based backup, too. But that's just the beginning. Here are five of our favorite ways to use Dropbox.

Share Big Files

 Anyone who passes around photos, videos, or other big files has most certainly discovered the puny file-size limits of most email servers. Dropbox can help. First, make sure that you're running the latest version of the app by downloading it from Dropbox's website. Then, in the Finder, locate a file in your Dropbox folder, and <Control>-click, right-click, or two-fingerclick it. In the contextual menu, select Share Dropbox Link. (In older versions of Dropbox, choose *Dropbox* → *Share* Dropbox Link.) Selecting this option copies a shareable URL for the file in question to your clipboard, ready for pasting into an email message or a chat window. The recipients don't even need a Dropbox account to use links. There's no quicker way to share large files.—LEX FRIEDMAN

Synchronize App Settings Across Macs

Share a Folder Want to collaborate with a group of people who use a mix of Macs and PCs? Dropbox offers an easy way: the shared folder. First you need everyone in



know the annoyance of setting up the same app again and again to work just the way you like it. That's where Dropbox can step in. Store an app's preferences in Dropbox, and as you make changes to settings on one computer, those settings also update on your other computers.

Not all apps allow you to store their preferences in Dropbox, but a number of notable ones do, including AgileBits' \$50 1Password 3 (*****; go.macworld. com/1pass), Running With Crayons' free Alfred 2 (####12; go.macworld.com/alfred) with the £15 (about \$23) Powerpack add-on (www.alfredapp.com/powerpack), Bare Bones Software's \$50 BBEdit (*********), and Smile's \$35 TextExpander 4 (***; qo.macworld.com/textexp4). Once you get accustomed to it, you'll wonder why more apps don't support this great timesaving feature.-DAN MOREN

the group to sign up for a free account at Dropbox.com. Then, in the Finder, <Control>-click (or right-click) a folder inside your Dropbox folder. In the

Link to Big Files To share a large file, simply <Control>-click an item in your Dropbox folder

and choose Share Dropbox Link (highlighted)

from the contextual menu.

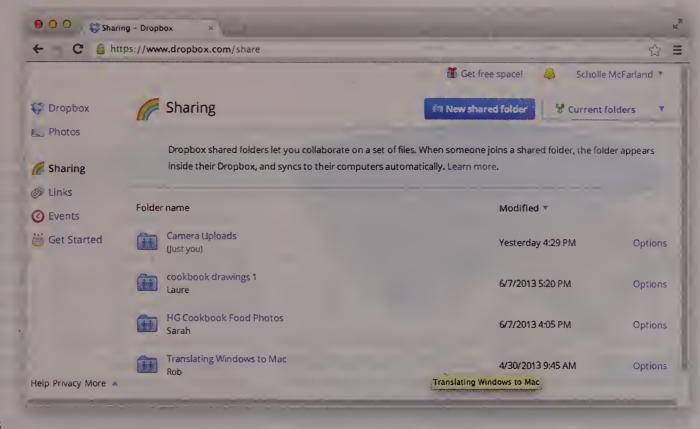
contextual menu that appears, choose Share This Folder. (In older versions of Dropbox, choose *Dropbox* → *Share* This Folder.) Your browser will open to Dropbox.com, and a window will prompt you to type in the group members' email addresses along with a short message for them. Once you've finished that step, people in the group can add, delete, and edit files in the folder, and the files will stay synced. Since anyone can access Dropbox through a browser, group members do not need to download any software to participate. -SCHOLLE SAWYER McFARLAND

Compile a Photo Album of an Event

Lots of people upload their pictures to Facebook or other online services, but not everybody is Web savvy. For example, at a recent 50th wedding anniversary gathering, plenty of folks were snapping pictures, but they weren't sure how to

If you maintain more than one Mac, you

Dropbox automatically saves versions of your files from the past 30 days, allowing you to roll the clock back to an earlier version or to restore a deleted file. share all of them. My solution? I used the free service Send to Dropbox (sendtodropbox.com) to create an email address where people could send their photos, which I collected into a folder. Afterward, I sent everyone a link to that folder. Easy peasy, and everybody with an email address and Web browser can take part, without having to download or install any software.--DAN MOREN



Resurrect Previous

Versions of Your Files

Have you ever accidentally deleted an important file from your Dropbox folder, or pressed Save and immediately regretted taking that action? If so, you'll be glad to know that Dropbox automatically saves versions of your files from the past 30 days, allowing you to roll the clock back to an earlier version, or even to restore a completely deleted file.

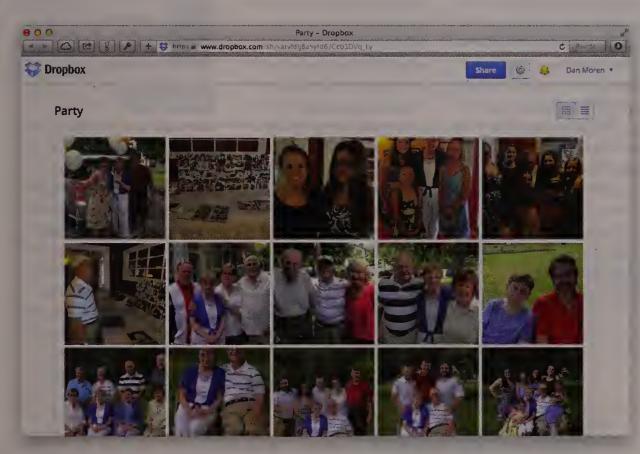
To find earlier versions of files, simply <Control>-click (or right-click) a file in your Dropbox folder in the Finder and select View Previous Versions. (In older versions of Dropbox, select Dropbox → View Previous Versions.) If you're viewing your Dropbox folder on the Web, choose Previous versions from the contextual menu. You'll see a list of numbered versions in reverse

Share Folders Easily You can quickly view all of your shared folders by clicking the Sharing link (shown on the left) at Dropbox.com.

chronological order. Dropbox includes other useful information, too: the person who edited the file, the device on which that editing was done, the date when the snapshot was made, and the file size. You

can see the contents of any version by clicking its name (for example, Version 44). When you find the particular file version you want, select the radio button next to it and click *Restore* at the bottom of the screen.

If you want to resurrect a deleted file, the process is slightly different. Visit your folder on the Dropbox website and then click the trash-can icon located immediately to the left of the search box. This action toggles between showing and hiding all deleted files. Deleted files and folders appear in gray along with a Kind indicator (deleted file, deleted document, deleted folder, and so on). To bring back a file, click it and find the version you want. Then select that version and restore it.-JONATHAN SEFF



Email Files to Dropbox Need to collect photos from a group of people? The free 'Send to Dropbox' service allows them to email their images to your Dropbox folder.

Reviews

Hardware and Software for All Your Business Needs



Hardware

HP Envy 120 e-All-in-One

***; \$200; HP; www.hp.com

Connoisseurs of cool tools will appreciate the Envy 120 inkjet MFP not only for its style, but also for its gadgetry.

The well-designed control panel is touch-based. Paper-handling features include an 80-sheet input tray; the 25-sheet output device is an arm that rotates out automatically. The Envy 120 duplexes automatically, too.

The scanner (which lacks an automatic document feeder) is notable for operating upside down: You lay the document face-up, and because the top of the unit is constructed of transparent glass, you can watch the scanner head glide across the document.

Nearly every component of the Envy 120 is motorized: The control panel swings up automatically when you print, for example, and even the paper cassette injection is motorized.

The color palette of photos is on the cool side, but that

matches the overall air of the Envy 120 nicely. Black pages are dark and sharp, and even draft-mode documents look decent. Speed is so-so, but who cares with a printer that's so fun to watch? Monochrome test pages (text and graphics) printed at about 5 pages per minute on the Mac; 4-by-6-inch photos, meanwhile, printed at 4 ppm to plain paper and 1 ppm to glossy stock. Full-page glossy photos took about 3 minutes at best quality.

Alas, pages are expensive. In addition to standard and high-capacity cartridges, an "economy" cartridge set offers slightly lower capacities. For black ink, the standard size costs almost 7.5 cents per page, the economy version is 6.7 cpp, and the high-capacity cartridge works out to 6.2 cpp. The cyan/magenta/ yellow tricolor cartridge costs 12.7 cpp with the standard size, 11.0 cpp with the economy offering, and 9.8 cpp with the high-capacity version.

The Envy 120 is a viable option for low-volume printing, and it will turn heads while it's working.—JON L. JACOBI

OWC Envoy Pro EX

******; \$315 (240GB), \$570 (480GB); OWC; go.macworld.com/owcenvoy

What's smaller than a portable hard drive, larger than a thumb drive, and really fast? The Envoy Pro EX external solid-state drive. It uses OWC's Aura Pro 6G SSD, which is built more like a RAM module than like a drive mechanism. OWC pairs the fast Aura Pro with a Sandforce controller and wraps them both in a sleek, anodized aluminum enclosure with USB 3.0.

Weighing 3.8 ounces and measuring 4.5 by 2.1 by 0.4 inches, the bus-powered Envoy Pro EX is perfectly portable. It's similar in size and shape to an iPhone 4S.

We tested the 240GB model, connecting the drive to a 2012 MacBook Pro with a quad-core 2.7GHz Core i7 processor, 8GB of RAM, and an internal SSD. The Envoy Pro EX wrote our large 10GB file at 216.8 MBps and read the same file at 181.5 MBps. It

wrote a 10GB folder full of smaller files at 197.0 MBps and read the folder at 176.2 MBps. Attached to a 2013 custom 13-inch MacBook Air with 8GB of RAM and speedier PCleconnected internal flash storage, it posted much faster read speeds, reading the large file at 423.5 MBps and the folder at 318.7MBps.

Its scores on the AJA System Test—371.8 MBps on writes and 410 MBps on reads—were also stunning. Those are the fastest AJA USB 3.0 write speeds we've seen, beating the results from every single-drive Thunderbolt device we've tested.—JAMES GALBRAITH



Software

Airmail

***; \$2; Bloop; airmailapp.com

Airmail's appealing interface can't entirely conceal this email client's shortcomings.

The first time it ran, my mail appeared with impressive speed. Airmail looks terrific, too. The app is smart enough to pull in Gmail labels and display them as different mailboxes; it also supports threaded conversations. Searches summon fast, accurate results. Dig into the slightly bewildering Preferences, and you can find

OWC Envoy Pro EX

multiple themes for your inbox; I preferred the default one, but all are eye-pleasing.

So far, so good. But in regular use, Airmail's drawbacks become apparent. Icons to check mail, to view attachments or conversations, or to view all messages from a given sender occupy a hard-to-see ledge above the mailbox-list column. A "quick reply" button sits atop the message-list column, but it opens a whole new composition window.

I also noticed a problem that other users have posted to Airmail's sole help forum: After a while, my Gmail messages started taking 45 seconds or longer to appear when I loaded Airmail. Announcements of numerous betas on Airmail's site suggest that this bug and others will be fixed in some future release.

Another glitch: I couldn't link my Dropbox account. I would click the button for it in Airmail's Preferences, log in to Dropbox, and get assurances from the site that a new folder had been set up to store my attachments remotely. But that folder never appeared in my Dropbox. Linking my Google Drive worked right out of the gate.

Airmail does a few things (such as search and its delightfully authoritative sent and received sounds) quite well, and an update has fixed some irksome bugs and shortcomings. Still, you might want to wait until future versions have worked out the last of its kinks.—NATHAN ALDERMAN



Keeper

###1; free (subscription \$10/device/year); Callpod; keepersecurity.com

This password manager supports all major desktop and mobile operating systems. Extensions are available for Safari, Chrome, and Firefox. You can use the basic functions without paying a dime. Advanced functions, such as syncing data across devices and backing it up to the cloud, come with a paid subscription.

Keeper uses a military-grade AES encryption algorithm. You create secure items by entering a Web URL and the appropriate login details, plus an optional note. Keeper is somewhat limited next to many competitors, which can follow complex login patterns and store extras such as secure notes, software licenses, and personal documents; but it is easy to use.

One item of note is its ability to export your data vault as a PDF, with the passwords in plain text. This option may seem risky, but used properly it is a great safety mechanism: Print the PDF, store the pages in a safe or a safe deposit box, and your business partners or family will have a permanent backup in case something hap-

pens to you. You can also share individual login items.

Overall, Keeper represents a great starting point for password management. It's much less attractive if you want syncing: To access your data across, say, an iPad, an iPhone, and a Mac, you're out \$30 per year—and at that price, you can find apps with greater functionality.—MARCO TABINI

Together 3

*****; \$40; Reinvented Software; reinventedsoftware.com

Most of us amass disparate pieces of information. Together 3 aims to hold all those bits in one organized place.

The left column lists sources, or groups of the items you've created or placed in Together. Some sources are automatically populated, but you can create custom groups or use "smart" groups based on search terms you specify. Avid taggers will want to take advantage of custom Tag Bundles, which are folders for grouping similar tags. You can edit plain-text and

rich-text items in Together; other file types show a preview when possible. Double-click an item to open it in its native app.

Together 3 executes its core duties with the same aplomb as the lauded Together 2. It also refines the design, including tabbed viewing for editable text items and a pop-up item-info pane that you invoke simply by pressing the spacebar. Another new feature lets you designate any item as stationery; then, when you select a stationery item, Together makes a fresh copy and puts it in your library. For example, I have FileMaker Pro databases that I copy and customize for different needs. Dropping them into Together as stationery allows me to spin off versions as necessary.

This version adds iCloud storage and syncing, too—but only if you buy Together 3 at Apple's Mac App Store. With no Web-based or mobile apps, Together's cloud feature can't approach those of some rivals.

Even so, Together 3 is one of the best-executed note and file organizers.—STUART GRIPMAN



Playlist

Everything You Need to Know About iPods, iTunes, and Mac-Based Entertainment

Get Ripped

Convert your DVDs to watch on your iOS device, Apple TV, or computer.

BY JONATHAN SEFF

ooking to liberate the movies in your DVD collection from the confines of their plastic-and-metal prison so you can enjoy them on your iPhone, iPod, iPad, and Apple TV? Well, look no further—all you need to do is get some free software and follow a few steps.

Step One: Install the Software

To rip a DVD with the free HandBrake software, first download the app (handbrake. fr). But HandBrake doesn't include the software needed to decrypt commercial DVDs, so you also need to install libdvdcss (go.macworld.com/lib), an open-source library that can circumvent the Content Scramble System used on DVDs. (You should, of course, rip only the DVDs that you've purchased. See note at the end.)

The first time you launch HandBrake and try to scan a DVD, it will say that you need additional decrypting software and send you to a page where you can download libdvdcss. Run that, and it will put libdvdcss where it belongs on your drive.

Alternatively—and especially if you encounter problems getting HandBrake to work with your DVDs—you can use a separate app to decrypt your DVDs, leaving

Preview - Source: 720x480, Output: 720x480, Anamorphic: 640x480 Loose (Actual size)

(Actual size)
Source: 720x480, Output: 720x480, Anamorphic: 640x480 Loose

Live Preview Duration (sect): 15 : Scale To Screen Settings

you with a Video_TS folder containing unencrypted files that HandBrake can then deal with easily. Some good choices are The Little App Factory's Riplt and DVDSuki Software's Mac DVDRipper Pro.

Step Two: Pick What to Rip

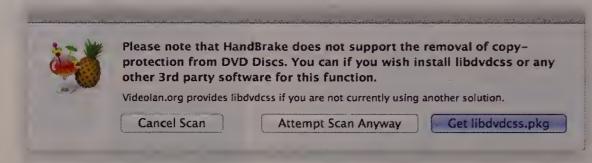
Now insert your DVD into your Mac's DVD drive and launch HandBrake. By default, the app opens a dialog box and asks you to select the DVD mounted on your Mac. Choose your DVD and click *Open*. Hand-Brake then scans the DVD for the titles it contains. Once the scan is complete, Hand-Brake chooses what it thinks is the main title, but you can click the pop-up menu

Pick and Choose Use HandBrake's Preview function to make sure you have the right title.

next to Title and choose the item you want to encode. Generally, the title with the longest duration is the DVD's main feature.

Want to make sure you've chosen the right title? Pick the one you think you want, then click the *Preview Window* button and a new window opens up. From there you can scroll through ten still images from the title or choose to encode and watch 15 to 240 seconds of the title.

If you encounter problems such as Hand-Brake quitting or crashing when it scans your DVD, or a DVD with 99 titles of almost the same length, you've run into a copyprotection scheme meant to thwart ripping. In that case, launch Apple's DVD Player application and navigate through the warnings, ads, and previews until you're playing the main feature. Then choose Go → Title from the menu bar, and look for the title with a check mark next to it. In Hand-Brake choose File → Open Source (Title Specific), select your DVD, enter that title



Additional Help Install third-party software to decrypt commercial DVDs.

number in the box, and click Open Title.

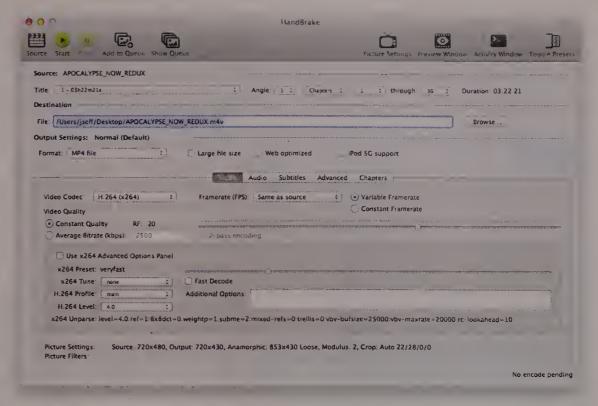
If you want to convert several items, you can select one item, click the Add To Queue button, and then repeat the process until you've added them all to the queue. You can go to the General tab of Hand-Brake's preferences and choose Use Auto Naming, which ensures that each title has a unique filename. You can also choose File → Add All Titles To Queue, which adds everything to the queue. From there you can delete any title that you don't want to rip.

Step Three: Choose a Preset

Now that you've decided which title(s) to rip, you need to choose your encoding settings based on the device(s) on which you plan to view the content. HandBrake includes some handy presets to help.

If the Presets Drawer isn't already open, click the *Toggle Presets* button at the top of the HandBrake window. In the drawer, you'll see two types of presets: Devices and Regular. In most cases, you can just focus on the Devices section. There you'll find options for Universal, iPod, iPhone & iPod touch, iPad, AppleTV, AppleTV 2, AppleTV 3, Android, and Android Tablet.

If you want to watch your movie on an iPhone, for example, choose iPhone &



lem, HandBrake can deinterlace while it rips. But the downside is that you sacrifice some picture quality.

Instead of using the Deinterlace setting, you can try the Decomb option. The Decomb filter looks at each pixel of each video frame and deinterlaces only frames that show visible signs of interlacing. That means that the filter can slow down the ripping process, but you should end up

Full of Features HandBrake's interface offers all the basics needed to convert your DVDs.

Subtitles: If your movie is in a foreign language, or you need to read the closed captions when you watch, HandBrake's Subtitles tab is the place to look. There, you can find whatever subtitle or captioning data comes on your DVD and decide which to include in your ripped file.

When you're all set, click the *Start* button. Depending on the length of the files and the speed of your computer, it can take a while to transcode the video.

You need to choose your encoding settings based on the device(s) on which you plan to view the content. HandBrake includes some handy presets to help.

iPod touch for the best-quality settings.
The Universal preset is helpful if you want a file that will work on all current Apple devices. If you find a preset that you plan to use often, you can set it as your default (otherwise, HandBrake defaults to Normal).

Step Four: Tweak Your Settings

Once you've picked your preset, you might want to tweak a few of the settings.

Decombing/deinterlacing: Many TV shows you'll find on DVD are interlaced; that is, each frame is displayed on screen as even lines and then odd lines, which can lead to jagged video when viewed on your device. To overcome this prob-

with smooth video that suffers minimal degradation in quality. Only the AppleTV 3 preset uses the Decomb filter, so if you want to use this filter with another preset, click the *Picture Settings* and the *Filters* tab in the window that appears. Click the *Decomb* pop-up menu and choose *Fast*.

Audio: Altering or removing audio tracks is a great way to reduce the size of your finished file. Click the Audio tab, and look at the audio tracks your preset has selected to include. It may have language tracks you don't need, or if your Apple TV isn't connected to a surround-sound audio system, you may want to remove a 5.1-channel audio track, for example.

Step Five: Tag With Metadata

Several applications can look up metadata online and add it to your files. Video Monkey and iFlicks are video-encoding applications that you can use to add metadata. And once you're done, just add the movie to your iTunes library, and it will be ready for you to transfer to your devices.

[Editor's note: The MPAA and most media companies argue that you can't legally copy or convert commercial DVDs for any reason. We (and others) think that, if you own a DVD, you should be able to override its copy protection to make a backup copy or to convert its content for viewing on other devices. Currently, the law isn't entirely clear one way or the other. So our advice is: If you don't own it, don't do it. If you do own it, think before you rip.]

Ask the iTunes Guy

Keep iTunes metadata when you re-rip, and deauthorize missing Macs.

BY KIRK MCELHEARN

This month, I look at ways to retain tags and metadata when you re-rip CDs and how to deauthorize computers for iTunes Store accounts.

Q: I have a standard-quality MP3 album on my Mac. Now, because I discovered the Apple Lossless format and still have a CD of that album, I'd like to rip it again in higher quality. But I don't want to lose any of the metadata. Is it possible to do this?

A: It is. There is an easy (mostly reliable) way and a slightly more complicated (but better) way. The first method is to launch iTunes, insert the CD into your drive, and then check to see that all the tags—

Album, Artist, Album Artist, Name, Genre, Composer—are exactly the same as yours. When you rip the CD again in Apple Lossless format, iTunes will ask if you want to replace the existing tracks. When it does so, it will keep your other tags, such as album art and lyrics, and iTunes-specific metadata, such as Plays and Rating. But in my experience, this method is hit-or-miss.

The second solution, which involves a few extra steps, always works for me. Put the MP3 files you plan to replace in a new or existing playlist. Insert the CD in your drive, select it in iTunes, create another new playlist, and drag the tracks from the CD's window in iTunes to that playlist. Import the CD, and you'll have two copies of the tracks: MP3 files in the first playlist



and Apple Lossless files in the second.

Now download Doug Adams's Copy Tag Info Tracks to Tracks (go.macworld.com/doug) AppleScript. Select the first group of tracks (the MP3 files), and launch the AppleScript. Put a checkmark next to each of the tags you want to copy, then click *Proceed*.



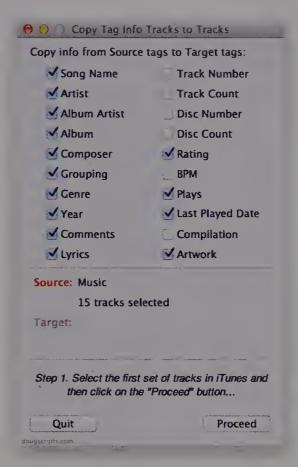
Select the newly ripped tracks and click Proceed again. The script will copy the selected tags to the new files, overwriting any tags they have. Check the new files to ensure the tags and metadata are correct, and delete the old files if you want to.

Q: How can I transfer my home movies to the Home Videos section of my iTunes Movies library? The older version of iTunes had no option for this. Now it has one for both regular and home videos. My home movies are in the Movies section, and I'd like to move them to Home Videos.

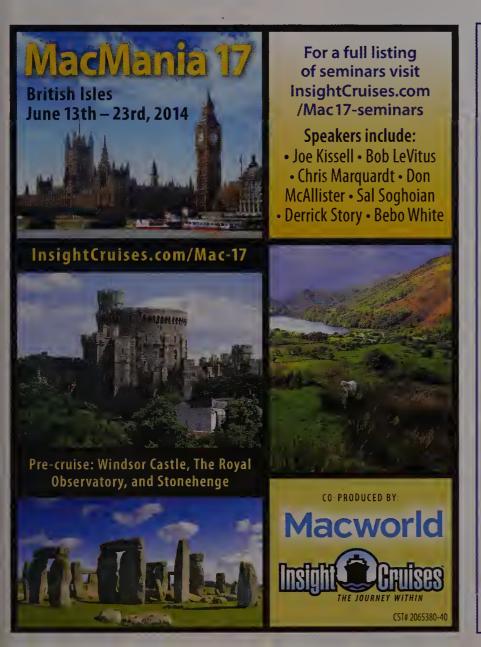
A: This is quite simple. Select all the movies that you want to change in iTunes, press \mathbb{H}-I, and click the *Options* tab in the Multiple Item Information window that appears. Then, in the Media Kind pop-up menu, choose *Home Video*. iTunes will thereupon move all those files to the Home Videos library.

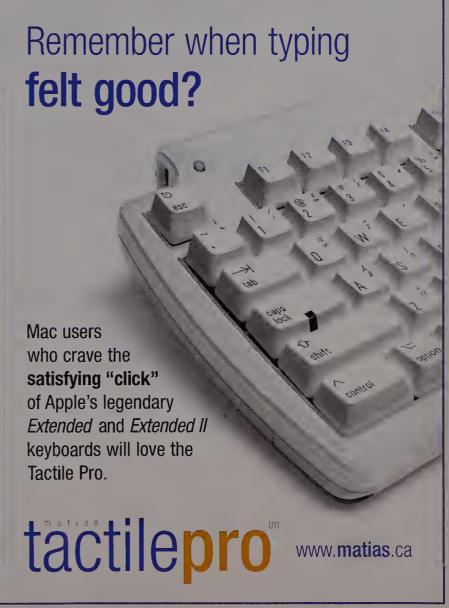
Q: How do I deauthorize an iTunes account on a computer that I no longer have?

A: Go to the main screen of the iTunes Store, and click Account under Quick Links. Enter your password, and you'll go to your Account information page. The Apple ID Summary section will show you how many computers are authorized. There's no way to deauthorize a specific computer here, but you can click Deauthorize All to remove all of them. (This option is available for you to use only once per year, and you won't see it if you have fewer than two computers authorized.) Once you deauthorize everything, you'll need to reauthorize each computer that you currently use. You can do so in iTunes by going to Store → Authorize This Computer or by attempting to play any iTunes content with digital rights management (DRM). iTunes will then display a dialog box asking you to enter the password for that item's Apple ID.



Smart Transfer With this AppleScript, you can copy your tags from older rips.





Hot Stuff

What We're Raving About This Month

Braven 850

The \$300 Braven 850 is a portable Bluetooth speaker system with a few tricks up its sleeve. In addition to 20 watts of sound and an auxiliary port for non-Bluetooth devices, it offers an 8800mAh battery for up to 20 hours of wireless playback and weighs less than three-and-a-half pounds. But especially cool is the 850's ability to charge a full-size tablet via its 2.1-amp USB port, and also the fact that you can wirelessly daisy-chain two speakers for true left/right stereo audio (braven.com).—JOEL MATHIS



Onkyo CS-255

More than just another shelf-top stereo, the \$299 CS-255 from Onkyo is a Lightningequipped-speaker-



dock audio system for your iPhone 5, fifth-generation iPod touch, and seventh-generation iPod nano. And for everyone else, it has a USB connection that lets you play from—and charge—other iPods and iPhones as well.

In addition to the two stand-alone speakers, the CS-255 also includes a CD player and an AM/FM radio with up to 60 presets (us.onkyo.com).—JOEL MATHIS

BlueFlame Slingshot

BlueFlame's Slingshot is a Bluetooth speaker whose waterresistance offers unique possibilities: Take it into the bathroom
and hang it from the shower head so that you can play tunes
or listen to the morning news—or even take phone calls—
relayed wirelessly from your iPhone or iPad. For nondangling occasions, you can pop the speaker out of the
sling and drop it in a \$20 To Go Sling that you can rest on
the ground or clip to a bag instead. The Slingshot comes
in two models: \$100 for one powered by four AA
batteries, and a \$119 version with a built-in rechargeable
battery (blueflamegear.com).—JOEL MATHIS

Spotify iOS Update

Streaming
music service
Spotify has a lot
of things going
for it, but the
experience of
using it isn't
necessarily
among them.
The company
has moved to



address some of those shortcomings with an update that primarily affects iPhone and iPod touch users. Oh, and a new icon goes along with it. First up is the Discover feature, which suggests artists and albums you might enjoy based on your previous listening habits, shows new releases from bands you like, and lists upcoming concerts for artists you follow. Another cool addition is the ability to edit playlists directly on your iPhone. And Spotify promises that it'll bring the new features to "everyone" soon (spotify.com).

-JONATHAN SEFF

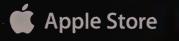
Parrot



With Active Noise Cancellation, Touch Panel, NFC and a Free App, the Parrot Zik are

The most advanced wireless headphones

Available At:





Brookstone



Create

Using the Web for Video, Graphics, Publishing, Photography, and Other Creative Pursuits

Share Photos From Your DSLR, No Computer Required

You don't need to crack open your laptop to tweet out high-quality photos.

BY DERRICK STORY

obile photography doesn't have to mean a compromise in image quality. You can shoot Raw files with a DSLR and use an iPad to publish JPEGs to social networks while on the go—without compromising image quality. And you can use a 16GB iPad mini (\$329; go.macworld. com/ipadminirev) to manage this workflow.

For pro photography assignments at events, I deliver Raw files to the client afterward, but publish JPEGs to its social network sites during the event itself. Here is one common setup that I use:

- > Canon EOS 60D with various lenses
- > iPad mini (16GB)
- > Lightning SD Card Reader
- > iPhoto for iOS
- > Photo Stream
- > Aperture or iPhoto for the Mac

Canon's EOS 60D (\$575; go.macworld. com/eos60d) accommodates SD Cards, which simplifies the workflow. In the 60D's



Show Everyone iPhoto for iOS makes sharing your images to an array of social networks a breeze.

menu, I configure the camera to shoot RAW+JPEG. I use the Raw files, which are 5184 by 3456 pixels, for final delivery of content to my clients. For the JPEGs, I use the fine-quality S1 setting, which produces Web-friendly 2594-by-1728-pixel files.

The 60D records Raw and JPEG versions of the images I shoot. Later I'll use the high-end image-editing tools in Aperture (\$80; go.macworld.com/aperture33) to process the Raws, but I post the JPEGs online from my iPad right away.

Uploading to the iPad

When I want to share images online, I make sure my iPad is connected to the Internet via Wi-Fi. My Photo Stream is turned on (Settings → iCloud → Photo

Stream → My Photo Stream), so new images on my iPad will upload to iCloud.

To transfer images from the camera to the iPad, I remove the SD Card from the Canon and connect it to the iPad mini via the Lightning SD Card Reader (\$29; go. macworld.com/lightning). The iPad sees both the Raw and the JPEG files, and it labels them RAW+JPEG.

I tap first each of the shots that I want to transfer, and then the blue *Import* button. In response, the iPad asks whether I want to import all of the photos or just the ones I've chosen; I indicate the latter. The software then copies both versions of each image to the iPad, which then notes, "Multiple formats imported - Photo Stream will upload only one version of each of these items." That's what I want: Photo Stream will upload the JPEG version, which is perfect for sharing online.

When the upload is complete, the iPad asks me if I want to keep or delete the files on the memory card. It's very impor-

For pro photography assignments at events, I deliver Raw files to the client afterward, but publish JPEGs to its social network sites during the event itself. tant to keep them. I'll revisit those images when I'm working on my Mac back home.

After a minute or so, I tap the *Photo* Stream tab at the top of the interface and look for the images I've copied from my camera. If they're there, I'm in business.

Now I can safely remove the big Raw files and JPEGs from the iPad's Camera Roll. I tap the *Photos* tab, tap *Edit* in the upper-right corner, tap the images I want to remove, and then tap the red *Delete* button in the upper-left corner. The Raw and JPEG versions of the shots vanish from my Camera Roll, freeing up space on my iPad. (I recommend waiting until you have a Wi-Fi connection to delete pictures from your Camera Roll.)

Editing and Sharing Images

I use iPhoto for iOS (\$5; go.macworld. com/iphotoios) to communicate with my pictures in iCloud. The JPEGs that I uploaded are available in the blue Photo Stream album in my iPhoto for iOS library. I tap the Photo Stream album to open it, and I scroll down to get the shots I need.

After some quick image editing, I tap the *Share* button and upload the photos to Facebook, Flickr, or Twitter. I can also use the Open In command to send the photos to Dropbox or another location.

After the Shoot

Following the event, I open Aperture and connect an SD Card to the Mac. In the Import dialog box, if the RAW+JPEG Pairs



Parked in a Pouch My 16GB iPad mini slips conveniently into the camera bag that I use for event photography.



option isn't enabled, I click the *Import Settings* menu and select *RAW+JPEG Pairs*.

I select *Raw files only* from the Import pop-up menu, and I bring in all the images from the SD Cards I used on the shoot.

When Aperture asks whether to keep or delete the files on the memory card, I choose *Keep*. For the moment, they are my backups. Once I've run the Vault in Aperture or archived the library via Time Machine, I can delete those images.

The Numbers Game

Each Raw file image that my Canon 60D captures occupies approximately 21MB of space. So just five Raw images consume more than 100MB of iPad memory. The

corresponding JPEGs, which are configured in the camera as Fine/Small, take up about 1.3MB of memory each. If I left the JPEGs on my iPad, 100MB of storage could hold more than 75 of them.

Photo Stream Archive

When you use iCloud for this workflow, many images will flow through your Photo Stream, which has a 1000image capacity. If you set up Aperture or iPhoto (\$15; go. macworld.com/iphotorev) to archive your Photo **All the Details** Select 'Raw files only' in the Import menu to import Raw files into Aperture.

Stream, you'll ensure that as older images are pushed off, you can still access them.

In Aperture, go to *Preferences* → *Photo Stream*, and check the boxes next to *My Photo Stream* and *Automatic Import*. The setup in iPhoto is the same as in Aperture.

Workflow Variations

If you're a JPEG-only shooter, you can simplify the process: Take your pictures; copy the keepers to the iPad; have fun with the selected few; and when you get home, transfer everything on the memory cards to your Mac for storage.

Raw shooters who capture relatively few frames can bypass the RAW+JPEG workflow and go with Raw. The iPad will see your files and let you play with them just fine—and the Raw files will upload to your Photo Stream. But keep an eye on the amount of free memory on your iPad.

I've found that wireless transfer using the Toshiba FlashAir SD Card fits in well with this workflow. I shoot RAW+JPEG, as discussed before, and then use the free Olympus Image Share iOS app to select the images to copy to my iPad. The cool thing about Image Share is that it copies only the JPEGs, leaving the Raw files alone. This simplifies the workflow. Later, when I return home, I copy the Raw files to Aperture on my Mac.

Protect Your Camera With a Rain Cover

Choose a waterproof cover to protect your camera from autumn showers on outdoor photo shoots.

BY DAVE JOHNSON



This rain cover's ease of use makes it ideal for protecting your camera against sudden cloudbursts in the field.

Vortex Media Storm Jacket

LCD and controls through a big clear plastic window on the back of the Sport Shield—and of course you can use the eyepiece as well. Your right hand stays dry because it snakes up through an access sleeve to control your camera. The Sport Shield's compact storage means that you can easily bundle it in its small mesh travel bag and take it with you on extended photo shoots.

Kata Elements Cover The Elements Cover (\$55 to \$90; go.macworld.com/

kata) looks like something you'd use to handle plutonium samples at an enrichment facility. It consists of a flexible (and cavernously large) clear plastic body, with three thin black fabric sleeves to accommodate the lens and both of your hands.

The body is transparent, so you can see your entire camera. And because you can insert both of your hands into the cover, Kata's cover feels particularly natural and easy to use. It is bulky, though, owing to its large plastic housing and to the fact that it closes with a long Velcro strip instead of a zipper. It doesn't fold up nearly as tightly as most of the other rain covers, and it lacks a carrying case. Nonetheless, if I had to choose one cover to take into a rainstorm, it would be the Kata.

LensCoat RainCoat

The RainCoat (\$50 to \$100; go.macworld. com/raincoat) consists of a thin neoprene tube that cinches tight around the lens

aking photos in a rainstorm can put a sudden, premature end to the life of your camera. To protect your camera while taking pictures in wet weather, dress it in a rain cover—usually, waterproof fabric that keeps water away from the lens and body, while leaving both the lens and the controls open for capturing images.

Rain covers come in a range of sizes to handle different lens lengths and flash attachments. I field-tested six candidates.

AquaTech Sport Shield

Available in Professional and Basic versions (I tried the latter), AquaTech's Sport Shields (\$80 to \$190; go.macworld.com/aquatech) are composed of lightweight waterproof fabric that folds up quite compactly. Installing one reminded me of putting a sweater on a dog; you unzip the Sport Shield's two zippers, pull the lens through, drape the shield over the camera body, and zip everything up. To prevent water from leaking in at the front, you can tighten a Velcro strap around the lens hood.

You'll also need a \$30 special eyepiece

from AquaTech to replace your camera's eyepiece. The Sport Shield stretches around the eyepiece for a watertight fit.

When you're ready to use your camera, you can see its

ThinkTank Hydrophobia Multiple rain sleeves provide maximum protection.



hood at one end and leaves the back end completely open so you can reach and see the controls (some material drapes over the camera to help keep it dry).

Larger versions of the RainCoat include a sleeve on the right side so you don't have to enter the rain cover from the open back end. It comes in several colors, including black, navy, and camouflage.

The RainCoat is unbelievably easy to don, and it's thin, light, and compact for travel and storage. Unfortunately the open back would expose the camera to too much precipitation during a lengthy photo session in a downpour.

Op/Tech USA Rainsleeve

The Rainsleeve (two for \$7; go.macworld. com/rainsleeve) has the same basic shape as other rain covers—it's a tube that you insert your camera into—but it's entirely composed of lightweight plastic.

An elastic drawstring cinches around the lens hood. The back is open; and the plastic is so thin and unobtrusive that I was able to successfully use my camera by handling it through the Rainsleeve, keeping my hands on the outside entirely.

It isn't especially durable, and it looks a little goofy—as if you had enclosed your camera in a giant plastic bag. Nonetheless, you may want to keep one of these simple, low-cost, lightweight rain covers in your camera gear bag, just in case.

Think Tank Photo Hydrophobia

Enclosing your camera in a waterproof sleeve means that you don't have any way to use a camera strap. Think Tank Photo solves that problem by integrating its own strap in the top of its Hydrophobia (\$140 to \$150; go.macworld.com/hydrophobia).

This cover is like AquaTech's Sport
Shield on steroids. The lens sleeve cinches
onto the lens hood with Velcro, and the
cover includes two sleeves that you can
insert your hands into. Like the Sport
Shield, this cover wraps around a replacement eyepiece (\$35, available for most
DSLRs) and has a large clear plastic viewing window. Even the eyepiece is protected (by a flap of plastic); if your camera
gets wet while ensconced in the Hydrophobia, you're doing something wrong.

Unfortunately the Hydrophobia manages to achieves its functionality only at the price of considerable bulk and complexity. To use the strap, for example, you must securely attach the camera to the inside of the rain cover—a difficult operation to perform in the field as the rain starts pelting down.

Vortex Media Storm Jacket

If you like the idea behind Lens-Coat's RainCoat cover—a single tube that's designed to stay open at both ends—you'll probably appreciate the Storm Jacket (\$36 to \$59; go.macworld.com/ stormjacket) as well. Made from water-repellent nylon and fitted with bungee cords at both ends, the Media Storm Jacket enables you to insert your camera, cinch the cover around your lens hood, and be ready to shoot within seconds. But unlike the RainCoat, this design lets you use the bungee at the rear to customize how open you leave the back of the camera.

Unfortunately, closing the back of this rain cover made using the camera controls unduly difficult. All things considered, I found the similar RainCoat somewhat more practical for real-life use.



Logic Pro X Gains Great New Features

An easier-to-use interface, Smart Controls, bass rigs, retro synths, and a free iPad controller app debut.

BY CHRISTOPHER BREEN



The release of Apple's Logic Pro X confirms that the company's music division remains fully attentive to the professional crowd.

Though Logic Pro has adopted some of the look of Final Cut

Pro X, Apple's digital audio workstation has lost none of its power while gaining valuable features on almost every front.

What's required: Logic Pro X is available only through the Mac App Store and costs \$200—no upgrade pricing applies. Your Mac must run OS X 10.8.4 or later. You'll need at least 35GB of storage for the optional content (you can get by with 5GB for the default Logic Pro X installation). And make sure any plug-ins you wish to use are 64-bit. Even so, Logic Pro X can open projects from Logic 5 forward.

the placement of elements you routinely use, such as transport controls (now at the top of the window, joining the buttons that represent common commands) and the Library pane (now on the left, and easy to expose or hide with the click of a button). Overall, elements are slightly bigger than they were in Logic Pro 9, so finding precisely the tool you want is easier.

When you need to dig deep, Logic Pro's command-rich menus are still your avenue for doing so. But when you want to do something quickly, the new layout simplifies getting to the task at hand.

Concerned with clutter: The new Track Stacks feature—specifically, the folder stack—lets you consolidate tracks you've selected into a single group (thus getting them out of the way). Once you've created the folder stack, you can use a single fader to mute and solo the stack as well as to control its volume.

The summing stack lets you consolidate the selected tracks—in this case by



submixing them into an auxiliary channel. And Logic Pro X's new Smart Controls allow you to provide a subset of simple controls for accessing an instrument's or recording's most common settings.

The new Drummer track consists of 15 virtual drummers—sampled from some of the world's best studio cats—who live inside Logic. Create one of these tracks, choose from four styles (Rock, Alternative, Songwriter, or R&B), and then choose the drummer you'd like to use.

More flexibility: What Logic Pro 9 did for timing with Flex Time (a feature that lets you subtly adjust the timing of where specific notes fall), Logic Pro X does for pitch with its Flex Pitch feature.

For a monophonic track (where only one note sounds at a time), Logic can display bars indicating how "in tune" a note is. You can gently drag the bar up or down to fill it and bring the pitch into tune. You can also make more radical adjustments and change the note entirely to change the melody.

If you find dragging a drag, just play the note you want on your MIDI keyboard to move it. You can also ask Logic to analyze the pitches in a track like this and extract its notes as MIDI data. **Familiar but Deep** Logic Pro X's interface will please pros without scaring GarageBand users.

New and improved instruments: The

Retro Synth instrument models analog, wavetable, and FM synthesizers from the past (Moog, Yamaha, and the like), with the oscillators, filters, amps, and effects you'd expect. Click a Settings button to tune and transpose the instrument and set how it behaves with your controller's mod wheel, aftertouch, and velocity.

Logic Pro X includes new versions of its Vintage B3, Vintage Electric Piano, and Vintage Clav plug-ins. In particular, the B3 (modeled after the Hammond B3 organ) is wonderful. Somebody at Apple clearly has an abiding love for these old organs.

Guitar players get seven new stompboxes, including Tie Die Delay (a reverse delay), Tube Burner (overdrive), Grit (distortion), Wham (when your guitar's whammy bar isn't enough), Dr. Octave (doubles the pitch an octave down), Flange Factory (a flanger), and Graphic EQ.

Apple has also redesigned the sound library for Logic Pro X with 1500 instrument and effect patches, 800 sampled instruments, 30 urban and electronic drum machines, and 3600 Apple loops.

The Art of Choosing Colors

Use color schemes to send the right message.

BY LESA SNIDER

icking colors that work well together can be tricky: Some pair up nicely; others don't. But with the help of a 300-year-old gadget, you can make good color choices.

A color scheme (or color palette) refers to the group of colors used in a particular project. Usually the designer picks a main color, and then chooses the other colors according to how they look together and what feeling they evoke when viewed as a group. When dealing with color, you're likely to encounter several crucial terms:

Hue means pure color, with no white or black added to it. Pure color (blue, for example) mixed with white produces a tint (light blue). Pure color (such as blue) mixed with black yields a shade (dark blue).

Saturation describes a color's vibrancy. A highly saturated hue has a vivid, intense color. A less saturated hue looks dull and gray. In choosing adjacent colors, it's a good idea to use similar saturation values.

Brightness is a gauge of how light or dark a color appears. Think of it as the amount of light shining on an object, from white (100 percent) to black (0 percent).

Using a Color Wheel

A color wheel is a circular diagram of colors that shows their interrelationships. Sir Isaac Newton laid out colors around a circular diagram in the late 1600s, and French painter Claude Boutet created one of the earliest color wheels in 1708.

A color wheel is based on the three primary colors—yellow, blue, and redfrom which other colors spring. By mixing equal amounts of the primary colors, you get a set of secondary colors—orange, purple, and green. Mixing equal parts of the secondary colors yields a set of six tertiary colors. Together, these colors comprise a 12-hue color wheel.

To use it, first pick a main color for your color scheme, and find the closest match to that color on the color wheel. Then use one of the following color-scheme rules to determine where on the color wheel to find other colors that go with the first one.

Monochromatic schemes use colors from the same wedge on the color wheel. Analogous schemes also use colors from the wedges on both sides of the main color. Complementary schemes use colors from the main color wedge and from the wedge directly across from it.

Most color wheels have a spinning dial for identifying the main color, plus arrows that point you to associated color wedges for a particular color-scheme rule.

Using a color wheel is easy. And once you get the hang of it, you'll be picking eye-pleasing palettes with aplomb.

Usually the designer picks a main color, and then chooses the other colors according to how they look together and what feeling they invoke.



Mix and Match A typical color wheel is based on three primary colors, three secondary colors, and six tertiary colors, arranged to indicate related or complementary colors.



free cloud space?



MacMate Disk is now free.

InDesign CC Boosts ePub Features

Adobe's cloud-based subscription option for InDesign offers better font menus and overall performance, too.

Review

RATING

THE PRICE

\$20/month
(annual subscription);
\$30/month
(month) to month)

COMPANY
Adobe

URL
adobe.com

When Adobe switched from selling its Creative Suite software in a box to releasing Creative Cloud software as a service, it also began featuring regular upgrades to InDesign and its other professional creative applications. In recent years InDesign

programmers have been rewriting the software's underlying code—and the result is a speedier InDesign with support for Apple's Retina and similar high-resolution displays, a new interface, a font-menu overhaul, a new QR Code generator, and significant ePub improvements.

Speed and interface updates: The new interface looks much sharper on a Retina display. And since InDesign is now a 64-bit application, it can use more than 3GB of RAM to boost performance when working with large or complex files.

Icons near the top of the New Document dialog box let you save or delete presets; the bleed and slug settings are more obvious; and a new preview button tells InDesign to display the new document in the document window before you click OK.

Font menu updates: InDesign CC's font menus are packed with new features. Because InDesign now displays fonts that contain a particular string of characters anywhere in their name, you can much more easily find bold, extended, or pro fonts—and fonts that have similar names.

You can now click a font name to see selected text in that font, or use the up and down arrows on your keyboard to navigate from one font to the other.

Adobe also changed the way InDesign displays font family members. For example, it indents the bold and italic versions of a font under the main font name rather than putting them in a submenu next to the font family name. Clicking the disclo-

Lorem Ipsum Da dolecte nimus, im quis imillam nonsenis eos voluptur iciusa plia ldus vidus, comnis pre nis poribus, cus eseribus doleni omnit alibus, omnis magnis sed unt debis ad eatatque sitas send ellabor ibusam eaturenis sust, te nimporro bla sinctatur am que Onessuntur? Qui qui vellut quam quidia sa dollandanim atias es dolorit et deliti hillab inctibu sdaeper quas prem hariatem blab ipsam facitat natum, aliquis es ip volut mil ipsam vol iasped quodi ipicium se sam vendis aute est, lam inve rerum sin susda ium aut expl untur, netum quis ditiis vendis et aut dit aut itatia volor audaeseque hicae officimin estet nis recaest orepelibus volecatiunt ut mi, pligenis volore nul consed ut id quia volo parum sit incita tibus nulliquo di cum eati rest harum rem dele comnimi, odiae dolup odiciis doluptatur molorum aut que taectia ne quo blanti sedipsam re, sin tion nimin rest ut omni mus, offic tectatia sect qui quid vellut quam serum quam, suntiur

sure triangle next to the font family name lets you show or hide family members.

You can create a set of favorite fonts and limit your font list to those favorites. Click the star next to a font name to add it to your list, and show only your favorites by enabling the *Show Favorite Fonts Only* checkbox in the Font menu in the control panel or in the character panel.

QR code generator: InDesign CC includes a Quick Response (QR) code generator under the Object menu. Just choose a style of QR code (Web Hyperlink, Plain Text, Text Message, Email, or Business Card), type the information that you want the QR code to display or link to, and choose a color. InDesign generates the QR code and either drops it into the currently selected frame or loads your cursor so you can place it on your page.

ePub improvements: Adobe also quietly improved many critical features involved in generating ePub files in In-Design CC. (ePub is the standard format

Dark View You can adjust the color of InDesign CC's default dark interface in the preferences.

for ebooks available on Apple's iBookstore, and on Nook, Kobo, and other e-readers.) Now you can export hyperlinked InDesign indexes, and map object styles to HTML tags and CSS classes. Embedded fonts work in Apple's iBooks, and you can use the Object Styles dialog box to assign ePub attributes to objects.

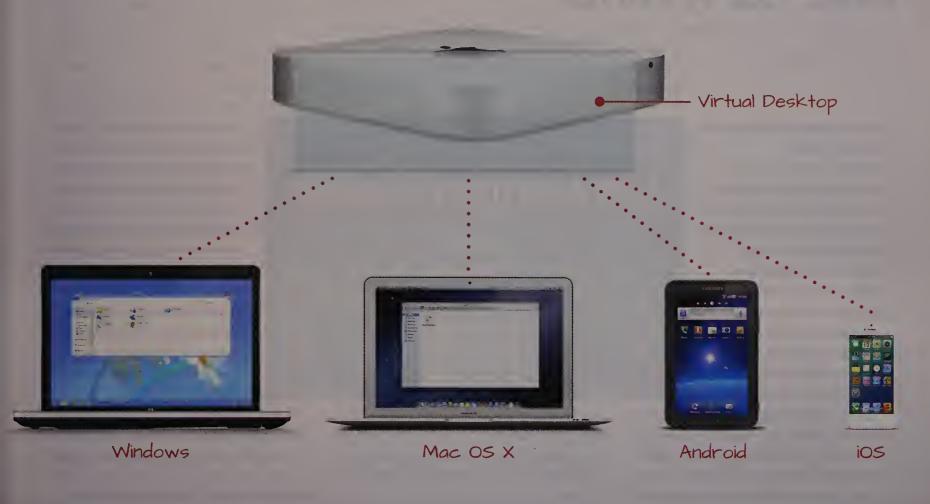
Adobe Exchange: InDesign CC has an Adobe Exchange window (Window → Extensions → Adobe Exchange) that you can use to browse, purchase, and install plug-ins and other add-ons. When you click an item, additional information appears.

Bottom line: For most users, InDesign CC isn't a major upgrade; if you're happy with InDesign CS6, the case for CC may not be compelling. But some people will find the ePub formatting improvements, font menu enhancements, and QR code capabilities of the new version very handy.



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Help Desk

Answering Your Questions and Sharing Your Tips About Getting the Most From Your Mac

Mac OS X Hints

The insider tips you won't get from Apple.

BY LEX FRIEDMAN

Block Unwanted Callers Without iOS 7

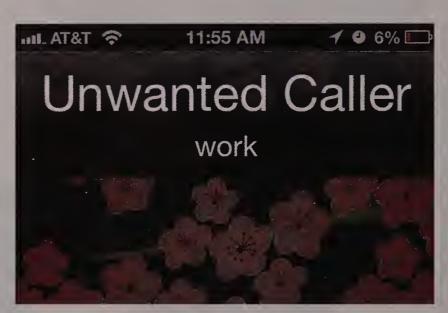
Are jerks, salespeople, and Crazy Great-Aunt Rita calling you nonstop? iOS 7 gives you the ability to block unwanted callers. But maybe your iPhone can't run iOS 7, or perhaps you want to see a log of the unwanted calls something the iOS 7 feature precludes. You have another way to handle such calls.

The solution hinges on creating a special contact

entry. You might name the new contact Don't Answer, Jerky Bonehead, or Loser McShutupington—it's your choice.

First, go into the Contacts app, tap the plus (+) icon at the upper right, and create the new contact without a phone number or any other details. Then, the next time you get a call from one of those particularly annoying folks, add their number to your special contact entry. Find the number—you can see it under the Phone app's Recents tab—and tap the button at the right. On the screen that appears, tap Add to Existing Contact, choose your special contact's name, and save.

Next time the no-goodnik calls, you'll see your chosen name and know not to bother answering. Clever Hints readers



Sorry, Can't Talk Now Create a contact entry with a distinctive name to serve as a holding pen for callers you don't want to speak with.

offered a bonus tip, too: Make a silent ringtone, and assign it to that contact. If your iOS device has GarageBand, you can create a silent ringtone in mere minutes.

Navigate Directly to Recently Accessed Files

As you probably know, the Apple menu has an entry for Recent Items (unless you turned it off in System Preferences). That section, unsurprisingly, lists recently accessed files and apps. The next time you're looking at Recent Items, however, try holding down the \mathbb{H} key.

iOS 7 can block unwanted callers. But maybe your iPhone can't run iOS 7, or perhaps you want a log of the calls—something the iOS 7 feature precludes.

When you do so, the names of your recent apps and fileswhich you could otherwise select to open—change a bit. For example, if your Recent Items list included a document called "Love Letter to Lex," that menu item would change with "Love Letter to Lex" in Finder. (And yes, this trick works for apps in your list, too.)

Thus, to quickly find specific files in the Finder that you know you accessed recently,

just head to the Apple menu's Recent Items section—and hold down the \mathbb{H} key.

Adjust All My Files' Criteria From the Finder

In Mountain Lion, customizing All My Files' search criteria—or the criteria for any similar Finder sidebar entry—is deliciously simple.

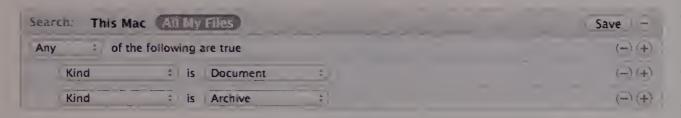
Just right-click (or <Control>-click, or two-finger-click with a trackpad) on the

Documents

Show "drm-ebooks.html" in Finder Show "Dropbox vs iCloud.html" in Finder

- Show "Dwollas.txt" in Finder
- Show "GNE 2 something" in Finder
- Show "GNE_Sunshine_Module_2_Field_Path
- Show "Hints October Print.txt" in Finder
- Show "Kirk.html" in Finder
 - Show "Screen Shot 2013-07-11 at 4.46.35
- Show "Sponsor everything.txt" in Finder
- Show "UpDesk.txt" in Finder

The Quickest Path Holding down the # key changes the entries in Recent Items so that you can navigate straight to an item in the Finder.



Customized Search In Mountain Lion you can easily tailor the search criteria for All My Files to include or exclude certain specified file types.

sidebar entry, and choose *Show Search Criteria* to see the Smart Search characteristics that power the entry. You can then tweak and resave the search factors you prefer. You might decide that All My Files should exclude, say, Word documents.

Now, it's important to note that you can't save over the existing All My Files saved search; you're just creating a new search. But the process is quick, painless, and nondestructive. You can even remove the All My Files entry from the Finder's sidebar, and replace it with your bespoke version.

Use Siri to Find Movies With Two Particular Actors

Sure, IMDb's advanced search tools can help you find instances when two particular actors appeared in the same film. But navigating to IMDb when you want to play "Six Degrees of Kevin Bacon" is no fun. If you have a Siri-capable iOS device, you can find cases of surprising moviestar overlap, using only your voice.

Give Siri an instruction like "Show me movies with Jason Biggs and Woody Allen," and the virtual assistant should suggest *Anything Else*. And in instances where a pair of actors have costarred more than once—"What movies have both Susan Sarandon and Tim Curry?"—Siri provides a list of all the matching films. (In our example, it's *The Rocky Horror Picture Show* and *Rugrats in Paris*.)

Tap a matching movie to see more information about the film.

Escape Screen Sharing

Suppose you're using your Mac to share the screen of another Mac. If you press %-<Tab> to switch apps, that keyboard shortcut sends a command to the remote Mac, flipping apps on that system, and not the one you're sitting in front of. Sometimes, that's what you want. Other times, it's a serious annoyance.

A third-party keyboard launcher can help. If you use Alfred or Quicksilver and

trigger the app, the key combination you press to summon the launcher goes not to the remote machine, but to your local Mac. Once Alfred or Quicksilver is in the foreground, you can press \(\mathbb{H}\)-<Tab> and switch apps on the local Mac instead. You're essentially using the launcher's keyboard shortcut to make the keyboard take control of your local Mac, and not the one whose screen you're sharing.

Not using a launcher? You can exploit this trick by triggering Spotlight. Press your keyboard shortcut for Spotlight—by default, \(\mathbb{H}\)-<Space>—and Spotlight should trigger on your local Mac instead of on the remote one. Now you can use \(\mathbb{H}\)-<Tab> to control the local Mac, too.

The Infinite Space of the Apple and Notification Center Menu Items

If you don't already know this hint, it may make your clicking life a lot simpler. If you do know it, be sure to pass it along.

As you probably recall, the Apple menu sits at the top left of your menu bar, and the Notification Center icon sits at the top right. For years, though, OS X has made clicking menu items in either position easier than it might appear. You needn't move the mouse cursor precisely to the slim confines of either icon when you want to click it. If you slam your mouse to the top-left corner of the screen—well beyond the Apple icon's

perimeter—and click, you'll still trigger the Apple menu. The same trick works with the Notification Center menu: Move the mouse all the way to the upper-right corner, fretting not about whether the cursor is atop the icon, and your click will still register as you desire. It's a lot easier to aim for the top corners than for the icons.

Avoid Triggering Hot Corners Accidentally

Many people use Hot Corners (accessed via System Preferences → Desktop & Screen Saver or System Preferences → Mission Control) to trigger actions. On my Mac, moving the mouse to the bottom-right corner reveals the desktop; going to the bottom-left corner triggers Mission Control. You can also use the corners to open Notification Center, access Launchpad, start a screensaver, or put your display to sleep.

But anyone who uses Hot Corners (which OS X also calls Active Screen Corners) sometimes triggers such mouse-controlled shortcuts accidentally. The solution: When you're choosing a Hot Corner setting from one of the drop-down menus, hold your preferred modifier key or keys. You'll see the choices change from, say, 'Mission Control' to '# Mission Control'.

From then on, your Hot Corner shortcut will work only when you're also holding the modifier key(s) you specified.



Accident Prevention When setting up a Hot Corner, hold one or more modifier keys. Afterward, you won't trigger the mouse-controlled shortcut action unless you're also pressing those keys.

Mac 911

Solutions to your most vexing Mac problems.

BY CHRISTOPHER BREEN

Monitor a Failing Hard Drive

Q: I happened to have Disk Utility open the other day, and much to my surprise I saw a warning about my Mac's hard drive—that it had failed something called a S.M.A.R.T. test and was not reliable. First, should I replace the drive? And second, how can I see alerts like this automatically?

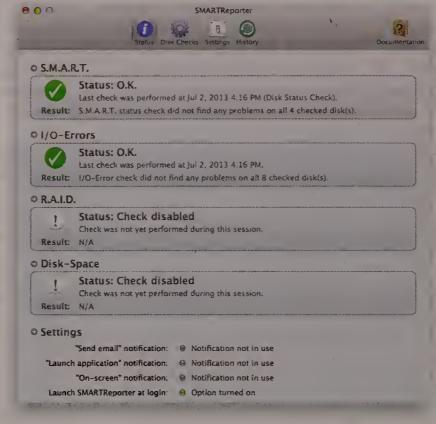
Kjeld Sorenson

A: S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) is a scheme built into hard drives, rather than computers. Failing this test

doesn't mean that the drive will die in the next few minutes, but it does indicate that the drive is gradually making its way toward death's door. The warning should allow you plenty of time to back up your data (which you should already have been doing) in preparation for the drive's eventual demise. Of course, as in your situation, the drive may have failed the S.M.A.R.T. examination weeks ago and may be that much closer to the grave.

In either case, given how inexpensive storage is, I wouldn't ignore the problem. At the very least, get an external hard drive and clone the failing drive to it by using a tool such as Carbon Copy Cloner (www.bombich.com) or SuperDuper (go. macworld.com/superduper). That way, you have not only a full backup of your failing drive, but also a drive that you can boot and work from. You can later replace the failing internal drive if you care to.

As for your second question, I agree with you that launching Disk Utility each day to check the drive's integrity would



A S.M.A.R.T. Reporter The current paid version of SMARTReporter can monitor not only S.M.A.R.T. status but also I/O errors.

be tiresome. Fortunately, you can find utilities to monitor it automatically. For starters, CoreCode has a free version of its SMARTReporter (go.macworld.com/ smartreplite). Launch the app, and it places an icon in your Mac's menu bar that indicates the health of your ATA, SATA, or eSATA drives, including internal solid-state drives. (USB, FireWire, and SCSI hard drives can't report S.M.A.R.T. status.) It monitors your drives from time to time throughout the day, and if it detects a failed S.M.A.R.T. test it issues a warning-producing a Growl notification, popping up an alert dialog box, launching an application, or sending an email message. This version is outdated and unsupported by the developer, though it works perfectly well with Mountain Lion.

For \$5, however, you can get the fully supported version 3 of SMARTReporter

(see "A S.M.A.R.T. Reporter"). This version adds the ability to check for data I/O errors that may indicate a problem.

Bjango's \$16 iStat Menus 4 (go.macworld.com/istatmenus) is another worthy option. In addition to monitoring your ATA, SATA, and eSATA drives' S.M.A.R.T. status, it reports how much of their capacity is being used as well as their read and write statistics. And the utility reports a whole lot more about your Mac-it tracks CPU usage, shows memory allocation, displays a network graph reflecting sent and received data, includes a temperature sensor, and provides details on your portable Mac's battery.

If you want even more help, turn to the big guns-Prosoft Engineering's \$99 Drive Genius 3 (go.macworld.com/ drivegenius), or Micromat's \$50 Checkmate (go.macworld.com/checkmate) or \$100 Techtool Pro 7 (go.macworld.com/ techtool). Drive Genius and Techtool Pro can not only monitor but also repair your drive (though no software utility can fix a problem with a drive's hardware). Checkmate is a monitoring utility, but one that goes beyond S.M.A.R.T. status reporting. In addition, it checks your Mac's RAM, RAID status, volume structure, file structure, and laptop battery, and assesses the integrity of the hard drive's surface (looking for bad blocks, for example). It also helps you spot problems in I/O checks, and during your Mac's POST (power-on self-test) procedure.

Block Autoplay Videos

Q: Lately I've visited a few websites that automatically display and play videos. I find this really distracting when I'm trying to read the article I came to see. Other than clicking the Stop button on each of these things, is there some way to disable them?

Andy Jensen

A: I'm with you. I can ignore flashing elements and pictures that change from time to time, but once sites introduce audio, they've crossed the line.

If you find the audio element to be the most distracting, you can just punch your Mac's Mute button. I often do that when I'm trying to watch a YouTube video and the site forces an ad on me before I can see the content I'm interested in.

In a situation where both the sound and visuals are a problem, you can block the video completely. Most of these videos are Flash-based, and fortunately you can find ways to block Flash. For Safari my favorite tool is Marc Hoyois's free ClickToPlugin (go.macworld.com/ clicktoplugin). With it installed, videos can't autoplay and any Flash content on the page is blocked, which can help if you find moving ads a distraction too. It doesn't block all ads, however, so you don't have to feel that you're depriving a site of its ad impressions; rather, you're stopping only ads so obnoxious that you would be loath to click them anyway. If it blocks something you do want to seefor instance, a video you'd like to watch after reading a related story—just click the video to start playback.

I like ClickToPlugin not simply because it blocks Flash content, but because it can also instruct websites to use HTML5 rather than Flash when you land on one of their pages. It additionally allows you to configure other kinds of plug-ins—Google Talk, Picasa, QuickTime, and Silverlight, for example—and to choose whether those items load automatically.

If you're using Firefox, you can find various Flash-blocking utilities by choosing Tools → Add-ons. In the resulting page you'll probably run across Flashblock (flashblock.mozdev.org), which is capable of dealing with too-anxious videos. A different FlashBlock app (go.macworld.com/flashchrome), made by a different developer, works with Chrome.

Bugs & Fixes BY TED LANDAU



Dealing With a Dusty iPhone Lens A small irregularly shaped object

began appearing in all of the photos and videos I took with my iPhone 5. As the object was always in the same location on each image, I assumed this meant a dust speck of some sort had gotten stuck on the exterior of the lens.

"No problem," I said to myself,
"I'll just clean the lens and all will be
well, at least for future photos." I was
wrong. None of my attempts to clean
the lens had the slightest effect.
Eventually, I was forced to conclude
that the dust particle had somehow
lodged itself on the interior of the
lens—where I could not reach it.

Conducting some online research, I discovered that I was not the only victim of this dust problem. On top of that, I found that there is no user-accessible fix. The only solution is to take the phone to an Apple Store and have the Geniuses there deal with it. So that was what I did.

My iPhone 5 is still covered by AppleCare, and everything went smoothly at the store. An Apple Genius confirmed the presence of the dust particle, went to a computer to check out some further instructions, and came back to announce that I would receive an entirely new iPhone, free of charge. A few minutes later, I was walking out of the Apple Store with a new phone. And as the dust problem has not returned in the

subsequent weeks, I am hopeful that this is a happy ending to the story.



Apple Hardware Test Yields to Apple Diagnostics

You may already know that you can check for internal hardware problems on your Mac by running Apple Hardware Test. If your Mac shipped with OS X 10.7 or later, you can access this software by restarting the Mac and immediately holding the D key. If that method fails, you may still be able to load AHT by holding both the <Option> and D keys at startup.

What you may not know is that Apple dumped AHT recently. New Macs introduced in June 2013 or later no longer include that software. Instead, they have a new diagnostic utility called, appropriately enough, Apple Diagnostics. You access it in exactly the same way as you do AHT: Hold the D key at startup.

The main difference between the applications is that Apple Diagnostics has a more refined and verbose interface than AHT does. And if Apple Diagnostics finds a problem, it offers more-detailed advice as to how to proceed. This approach is consistent with Apple's ongoing strategy to make its computers more consumer-friendly and easier to use, even for such "techie" tasks as diagnosing hardware problems.

Share your Mac-related problems by writing to bugs@macworld.com.

Create and Save Styles in Pages, TextEdit, and Mail

Q: I have tried numerous sources to find a way to establish my own format for text in Pages, TextEdit, and Mail. In each application, I am able to set a style—including a color—but on opening a new document I find that the style has not maintained the color. Is there a way to create a style that maintains colors for new documents?

Hugh Carter

A: I'll address the matter on an applicationby-application basis.

Pages: This is easily done. Launch Pages, create a new document on your Mac, and choose the font, text, text size, and color. From the *File* menu, choose *Save as Template*. Name your template and save it to the default location (the My Templates folder). When you wish to use this "style," just select *File* → *New From Template Chooser*, and in that template chooser click *My Templates* and then open your custom-colored template.

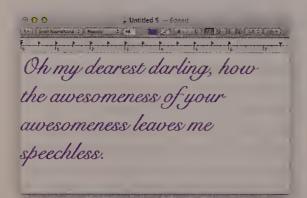
TextEdit: Although TextEdit doesn't let you save documents as a template, it does permit you to create a style that includes color. First, ensure that all new documents will be in Rich Text Format. (Open TextEdit's preferences and enable the *Rich Text* option in the New Document tab.) Create a new document, and configure the Font, Style, Size, and Color toolbar controls (see "Purple Prose").

From the Styles pop-up menu at the top-left of the window, choose *Show Styles*. You'll see a sheet reflecting the document's current settings. Click the *Add To Favorites* button. In the resulting sheet, name the style, enable the *Include the font as part of the style* option, and click *Add* to tack it onto the list of styles in the toolbar's Styles pop-up menu. When you next create a TextEdit document and want to use this style, choose it from the menu.

Mail: You won't find styles in Mail, but it does have stationery, and that's your avenue to creating messages that include the font, text size, and color you prefer.

First, create a new message. Press the spacebar to create an empty character space, and then highlight that space. Choose Format → Show Fonts. Select a font from the Fonts window. If you normally compose your messages in plain text, the application will ask whether it should convert the current message to rich text. Click the Convert button to agree. Now configure the text, size, and color settings. When you finish, choose File → Save as Stationery and, in the sheet that appears, name your stationery.

When you next wish to use the "style" you've created, start a new message, click the *Stationery* button at the top-right



Purple Prose In TextEdit you can create, save, and impose custom styles (including colored text) on your documents.

Mac 101

Enlarge a Browser's Toolbar Text

Q: I recently purchased a 27-inch iMac. Although I love it in most respects, I find some text on it to be uncomfortably small. In particular, Safari's Bookmarks Bar is very hard for me to read. Is there anything I can do to increase its size?

Mary Andrews

A: I'm afraid not. I've searched the Web for an extension that increases the size, and I've come up empty. You can, of course, change the resolution of your iMac in the Displays system preference so that everything is larger, but afterward you'll find that objects look less crisp. Another option is to open the *Accessibility* system preference, enable the *Use scroll gesture with modifier keys to zoom* option, and then hold down the <Control> key while using the mouse wheel (or a two-finger upward swipe on a trackpad) to temporarily zoom the display in and out.

If this problem bugs you enough to compel you to switch to another browser, I suggest looking at Firefox. I recommend Firefox specifically because of the Theme Font & Size Changer add-on (go.macworld.com/ffsize). Unlike some other zoom add-ons and extensions you might encounter, this one is intended to affect only Firefox's windows, menus, and toolbars. Install it, restart Firefox, and choose *Tools* → *Theme Font & Size Changer*, and you'll find that you can change the font, font size, style, weight, color, and background color of those elements. If you were to increase the font size to 14, I doubt you'd have any trouble making out items in the toolbars. (Of course, at this setting you'd see fewer items in the toolbars, as the larger text would push other items to the Show More Bookmarks menu.)

corner of the message window, and from the Custom stationery heading, choose your stationery. When you start typing the message, you'll find that your prose is as purple as you've wished to make it.

Skirt FaceTime Restrictions

Q: I'm a casual user of FaceTime, and it seems to work well most of the time. However, I've just noticed that I can't establish a FaceTime connection with my daughter who is traveling in the United Arab Emirates. She has her iPhone 4, and we've been successful with FaceTime sessions using this gear here in the United States. Can you shed some light on what's going on and how to get FaceTime working?

Walt Pinkston

A: The UAE's Telecom Regulatory Authority restricts access to portions of the Web, as well as person-to-person video communication such as Apple's FaceTime.

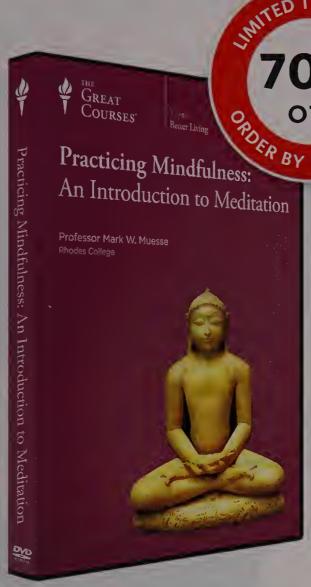
This policy is not enforced through the

handset but rather via the country's carriers. Any IP address originating in the UAE is subject to this censorship, which explains why you can't establish a connection with your daughter.

The way around it is for her to use a virtual private network. In essence this tactic tells the world that the device is communicating by way of an IP address that is in a country other than the UAE, and is therefore not subject to its restrictions. Various services are available, including ExpressVPN, Hotspot Shield VPN, Ivacy VPN, PureVPN, and StrongVPN. A Google query will take you to each one.

Of course, a VPN can be helpful even if you're not in a region where access to the Web and other communications is limited. Its primary purpose is to provide secure communications between you and, say, an office server that lives behind a corporate firewall. But it's also a common way to enjoy content in another country that can't be consumed outside that country. For example, many Americans stream BBC programming over a VPN connection.





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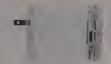
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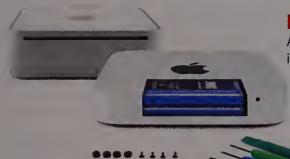
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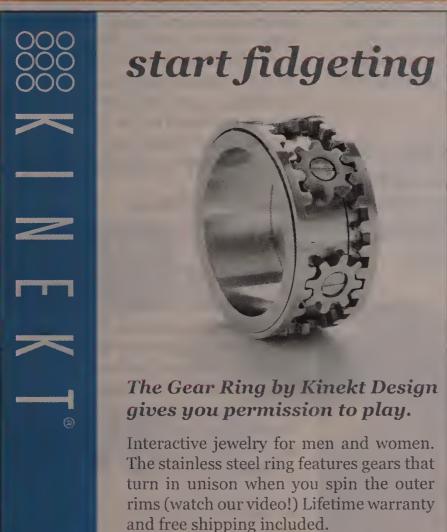
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Why iOS 7's Design Is Bold but Flawed

In a long-overdue move, Apple revamps the mobile operating system's look, but makes a few missteps.

am standing at the front of a darkened room full of middle-school girls, telling them about user interface patterns and trying to get them excited about reading Apple's iOS Human Interface Guidelines.

It's going better than I expected—they seem to be into it. I guess that's the kind of girl who signs up for a weeklong summer camp about iOS development. Then I arrive at my single slide about Apple's upcoming changes to the iOS platform. Suddenly a hand shoots up.

"Why did they do that?"

I try my best to answer, but leave thinking I owe the girls a fuller explanation and more analysis. So here goes:

From Faux 3D to Real 2.5D

According to Apple, the mission of iOS 7 is to emphasize the user's content by eliminating ornamentation. Giving user content top priority used to mean employing photo-realistic details and analog metaphors to help users intuit how an app worked so they could access their content or perform their tasks quickly and easily.

But the visual cues that once taught us how to interact with a new type of device have grown cumbersome as we've become familiar with the iPhone and iPad. The elimination of artifice and ornamentation hasn't changed most of the interface patterns; it has merely removed visual distractions.

In shedding its faux-3D skin, iOS has transformed into something remarkable, with a new kind of depth and motion. Instead of using drop shadows and strong highlights to imply dimension and depth in a fairly static screen, Apple is now relying on spry animation and the *parallax* effect—in which flat planes move independently of one another—to convey a sense of depth.

In my former life at an animation studio, I used this same approach, calling it "two-and-a-half D" (2.5D). Though this

technique lacks the dimensionality that, for example, the old app icons had, with their glossy overlays and deep shadows, the parallax and depth-of-field effects are far more lifelike than artificial-3D effects.

In iOS 7, simply tilting the iPhone hints at where interface elements exist in relation to each other and to the background. Moving from home screen to folder to app feels a bit like the experience of watching the short film *Powers* of 10 (go.macworld.com/pof10) or like falling into Mary Poppins's carpetbag: The bag proves to be larger than it first appears, and the effect is delightful.

Armchair Art Direction

The static screenshots Apple revealed on day one don't do justice to iOS 7, as the beauty of this new interface design lies in its depth and motion. That said, critics have voiced some valid concerns. Some of the problems that have been noted with

In shedding its faux-3D skin, iOS has changed into something remarkable, with a new kind of depth and motion.



iOS 7 are ones that already have solutions, which makes them feel like missteps.

For one thing, the icon grid created by Apple design guru Jony Ive feels "wrong," in that the glyphs within the icons just don't look harmoniously balanced. I'm hoping this will change by the time the final release appears. (Another problem critics had noted, concerning the choice of Helvetica Light for the system font, has in fact been changed—Apple has since replaced it with the much more readable Helvetica Regular.)

The other major problem I see is with the general lack of emphasis and differentiation between interface choices the user is offered. I notice this in particular with the overly austere action sheets: With the button borders gone, the only indication of the "preferred" choice is slightly bolder text. It's impossible to tell at a glance what the least destructive option is, and sometimes it's even hard to distinguish between the content and the UI.

These concerns aside, however, iOS 7 is an incredible step in a very cool direction.

Apple Kills Its Darlings

Apple is a master of reinvention, and this bold new design direction is overdue—when something stops working, it has to go. With this move toward a more kinetic and realistically 3D interface, Apple is trying to make the device itself disappear. The lightness and airiness of iOS 7 lends an already-thin device the illusion of an almost impossible ultra-slimness.

And to the girls at App Camp, I'd respond: "Apple did it because after six years it was time to move on. I can't wait to see what you all make."

Christa Mrgan designs audio software for Rogue Amoeba (rogueamoeba.com). She lives in the Pacific Northwest with her husband, daughter, and cat.

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